

Number 12

PRACTICAL SUGGESTIONS for TEACHING

HOLLIS L. CASWELL, Editor

THE GIFTED CHILD IN THE REGULAR CLASSROOM



ARIAN SCHEIFELE

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PRACTICAL SUGGESTIONS FOR TEACHING

Edited by HOLLIS L. CASWELL

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NUMBER 12

THE GIFTED CHILD IN THE REGULAR CLASSROOM
Marian Schetfele

The Gifted Child
IN THE
Regular Classroom

By MARIAN SCHEIFELE

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Editor's Introduction

THE author of this monograph has written about an extremely important educational problem in a highly practical way. Provision for gifted children is a much-discussed subject about which all too little is done. One of the principal reasons so little has been done is that most experimentation with the gifted has involved some type of special grouping. This procedure is not feasible in many schools with small enrollments; it implies a social point of view which many people resist; and it adds to educational costs.

This discussion strikes directly at the problem of providing for the gifted child in the regular classroom. It is full of suggestions that any teacher who is interested in doing a better job can follow out. Its widespread use would result in great improvement in opportunities for the gifted children in our schools.

HOLLIS L. CASWELL

Foreword

EDUCATORS have long been aware of the varied needs, abilities, and interests of the children in our schools. They have sought to employ appropriate curricula, materials, and methods to meet the wide range of abilities that prevails in every classroom. Despite our attempts to bring "the greatest good to the greatest number," our schools sometimes fail to meet the particular needs of the individuals and groups they serve. Gifted children constitute one such neglected group. The school's responsibility for recognizing and developing these individuals' capacities in the early years of their school careers must be acknowledged.

This obligation has its bases in our major educational objectives. Education in a democracy calls for giving each youngster the opportunity for developing to the maximum those attributes which will make him a happy, successful person, now and throughout life. This principle emphasizing self-expression and self-realization of the individual suggests programs developed in terms of individual needs. An appropriate program for gifted children will be different in some respects from those for other youngsters.

Education in the United States is also committed to promoting the general welfare. Gifted children will in future years make outstanding contributions to the progress and human welfare of our nation; indeed, the very survival of the democratic way of life may lie in their hands. Many of them will serve as leaders in government, industry, labor, and crafts; some will be the inventors, engineers, and scientists, the artists, composers, and writers, the leading doctors, educators, and farmers of their times.

The achievement of the aims described above—promotion of the general welfare and self-realization and self-expression of the individual—requires early identification of children of exceptional ability, provision of special training needed for the development and full use of their talents, and guidance in personal growth that will assure happy and effective relations with others as well as successful self-adjustment. These are the goals held for *all* children, it is true, but there are unique problems involved in furnishing appropriate experiences for gifted children which require special provision in the total school program.

This book does not recommend a specific school program for gifted children. Because of the wide variation among school systems regarding available personnel, physical facilities, and funds, each system must develop its program within the framework of its educational objectives, according to the needs of its children. Whatever program is adopted, the teacher occupies the key position by virtue of her close association with the children and her many opportunities for observing their work and behavior and for giving necessary encouragement and guidance. Often the teacher feels inadequate with gifted children if she is less talented than they. She must overcome this if she is to understand her pupils' gifts and the problems they often face because of their endowments.

It is with the hope of furthering such understanding and suggesting ways to develop the talents of gifted children in the classroom that this monograph has been written. Its purpose is twofold: to serve as a practical aid to teachers, and to stimulate in their classrooms the experimentation which will lead to greater enrichment of experience and personal development for the gifted child.

M. S.

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Identifying the Gifted Child

It is generally agreed that identifying the gifted child as early in his life as possible is highly desirable from the standpoint of both the full development of his abilities and his personal adjustment. Leta Stetter Holingworth states that the highly intelligent child's need for "a supplement to the standard curriculum" is greatest at the primary- and elementary-school level, and that his personal problems pertain chiefly to the period before twelve years of age.(1)

WHO IS THE GIFTED CHILD?

Intellectual Superiority—One Criterion

Various terms have been used in professional circles and among laymen to denote the gifted child—genius, superior, brilliant, and the like. All imply outstanding ability, with the emphasis on intellectual superiority. This concept might be attributable to the fact that the most intensive and best-known studies of gifted children—those conducted by Lewis M. Terman of Stanford University and Leta S. Holingworth of Teachers College, Columbia University—utilized mental superiority as the primary criterion for the selection of subjects in their experimental classes. The standard for inclusion in Terman's group was 140 I.Q., as measured by the Stanford-Binet Test of Intelligence.(1)* Minimum requirements for admission to Professor Holingworth's classes for the gifted include a Stanford-Binet I.Q. of 130, along with emotional maturity, social adaptability and physical fitness.(1)

* Number in parenthesis refers to number assigned in Bibliography.

In each case, defining the lower limit of intellectual giftedness was arbitrary, as is true in any situation in which a line of demarcation is set. The question immediately arises as to whether a child of 139 I.Q. is *not* gifted if another who has an I.Q. of 140 is. The question of where giftedness begins on a test score scale is highly debatable and will be treated more fully in subsequent chapters.

Creativity as Evidence of Giftedness

In current thinking, giftedness is regarded as including more than intellectual ability. Gifted children as considered here include those with special talents in mechanics, science, the arts, and social relations, as well as those of high general intelligence. Superiority in these areas is best manifested in outstanding performance. However, skillful performance alone is not adequate evidence of giftedness. Creativity, or originality, is the distinguishing characteristic of the work and behavior of the truly gifted, and studies of geniuses in music, art, and mechanical invention reveal that outstanding *creative* achievement is almost invariably accompanied by a high level of intellectual ability.(11)

On the basis of these findings, giftedness might be defined as: "outstanding creative ability in any one or more of a number of areas of human achievement." (25) Whether this creative ability with its usual component of high intelligence *produces* valuable things depends upon other elements that are not easily identifiable. A strong inner drive is thought to exert a forceful influence in the direction of maximum achievement. Other qualities or conditions must also operate in achievement. How else may we account for the failure of unknown numbers of gifted individuals to realize their full capacities? Possessing both high intelligence and special talent, many have created nothing.

To *produce* creative work, the individual must be stimulated, his urge to create nurtured, and his gifts developed. And he too must exert effort, for his obligation to contribute to society's welfare is greater than that of individuals whose capacities are smaller.(22)

KINDS OF INFORMATION NEEDED

In view of the current broad concept of giftedness, it is evident that the gifted child cannot be identified by his high intelligence alone.

Social and emotional maturity, physical health, and intellectual ability are all involved in every child's achievement of optimum development. In the case of the gifted child, the development of these combined factors is of no less importance.

The whole child, then, needs to be studied and many sources utilized if the identification program is to be educationally sound. Personnel and facilities for comprehensive analysis will of course vary with school systems, but it is well to be aware of the kind of identification program that ideally meets the needs of the situation.

The items listed below indicate the kinds of information that are needed. They should be compiled from tests, rating scales, and inventories administered by specialists and teachers in the school; from the observations and reports of teachers, parents, and other adults who have been associated with the child; from conferences among school and community personnel; and from interviews with the parents and the child.

Personal data (birth, age, etc.)

Physical health (physical examination)

Intellectual ability

Social-personal development (needs, as well as skills already developed)

Emotional maturity

Social history (home, community)

Preschool growth and development

School history

Achievement in major subject-matter areas and special areas

Interests and hobbies

Special abilities (talents)

Out-of-school activities

The question of whether to administer a battery of tests first and supplement the results with other data, or to evaluate the children's abilities and achievement first and verify the conclusions by objective measurement, is open to debate. Both subjective and objective information are needed. In the minds of many, they are of equal importance. Perhaps they can be gathered simultaneously as the identification program progresses. In most cases, however, the child's accelerated development is observed by parents and other adults during the pre-school years and subsequently by kindergarten and early primary-

grade teachers. Testing is ordinarily not employed before the first grade (the reading readiness or intelligence tests).

Since subjective evaluation might precede objective measurement in actual practice, it will be considered first as one of the several means of identifying the gifted child.

SUBJECTIVE EVALUATION

In the school the teacher holds the key position in the identification of the gifted. She depends for invaluable assistance on parents and other adults associated with children, such as playground directors, pediatricians and physicians, social workers, leaders of church groups, nursery school or day-care center personnel, school psychologists, guidance supervisors, special teachers, and classroom teachers of previous years. Observation of children in varied activities and situations can give a comprehensive picture of their development in all areas of growth and ability.

Charged with the responsibility for recognizing giftedness in children, the teacher might well ask, "What constitutes reliable evidence or manifestation of giftedness?" The task of identification is not always easy. In earliest childhood, children learn to say and do those things that bring them approval and praise from adults. As they grow older, their greatest satisfaction is derived from acceptance by peers, who often resent superiority. Because of this, the gifted child sometimes conceals his abilities to answer correctly, perform well, follow directions efficiently, or complete a task quickly. In seeking to attract the praise of adults, on the other hand, he may tend to imitate them in speech and mannerism and thus appear to be exceedingly mature and "advanced for his age." Actually, he has acquired easily and prematurely certain adult reaction patterns and vocabulary that are not based on real understanding.

In the classroom teachers are apt to overrate the intelligence of children who are neat, obedient, friendly, or talkative. The child who is independent in his thought or behavior or who asks embarrassing questions is sometimes irritating to the teacher and does not win her approval; yet originality and curiosity denote superior intelligence.(11)

The most gifted child in the class may seem among the least capa-

ble of his group because of his lack of interest in the routine(20) or because his performance is blocked by emotional problems. Tension and anxiety often "lock up" this child's ability to perform intellectually or socially. In still other cases outstanding performance may denote a combination of certain abilities such as special muscular or mental characteristics, coupled with rapid orientation, concentration, and interest, rather than all-round superior intelligence or special talent.(13)

Performance

However, superior performance is one of the indices of exceptional ability, for outstanding achievement certainly reflects aptitude.(1) The child whose painting incorporates form and color in a manner worthy of those many years his senior, or the child who is able to pick out on the piano tunes that he has heard just once; or the child who consistently shows exceptional initiative in exploring a topic and compiling the data offers convincing evidence that he is capable of outstanding performance. "The final proof of genius is found in the work which genius produces."(18) Teachers, parents, and other adults can detect special abilities early in the gifted child's life.

Personal and Mental Traits

In addition to performance, there are personal and mental traits which help to identify the gifted child.(8) The study made by Lewis M. Terman of 1,528 gifted children and the findings of others have revealed some characteristics which are generally typical of the group,(1) and which may serve as guideposts for subjective evaluation in the identification process. Of course, all gifted children do not possess *all* of these attributes, nor are these tendencies characteristic exclusively of the gifted. Furthermore, every child who exhibits these traits is not necessarily an outstandingly bright child. It *can* be said, though, that *as a group, gifted children in general tend to have these characteristics*; because of individual differences such as exist among all children there is really no typical gifted child. Individuals vary as to areas of superiority, and within each child there is uneven development of various abilities.

These characteristics, classified as intellectual, physical, social, and emotional, are presented in the following list for ready reference.

1. *Intellectually*, the gifted child, in relation to other children, tends to:
 - A. Possess superior ability in reasoning, generalizing, dealing with abstractions, comprehending meanings, thinking logically, and recognizing relationships.(20)
 - B. Perform highly difficult mental tasks, an ability described as "power."(1)
 - C. Learn more rapidly and easily.(20)
 - D. Show intellectual curiosity.(13)
 - E. Possess superior insight into problems.(20)
 - F. Have a wider range of interests.(20)
 - G. Show greatest superiority in reading ability, both in speed and comprehension; language usage; arithmetical reasoning; science; literature; and the arts.(20, 1)
 - H. Do effective work independently.(20)
 - I. Apply originality and initiative in intellectual tasks.(13)
 - J. Show less patience with routine procedures and drill.(20)
 - K. Exhibit alertness, keen observational ability, and quick response.(7)
 - L. Show as much unevenness in abilities in the subject-matter areas as other children.(26)
 - M. Have a longer interest span;(13) show more interest in abstract than practical subjects;(26) exhibit greater superiority in attainment in abstract subjects and less in manual activities.(7)
 - N. Have an interest in the future, a concern with origin, destiny, and death though unable emotionally to accept realities of the latter.(7)
(Gifted boys excel gifted girls in general information, arithmetic, spelling, science, and history; girls over ten are slightly superior to boys of that age in language ability.)(13)
2. *Physically*, the gifted child, in relation to other children, tends to:
 - A. Be slightly heavier and taller, and to be heavier in relation to height.(20)
 - B. Be somewhat stronger and healthier; be well nourished.(15)
 - C. Be relatively free from nervous disorders.(15)
 - D. Be a little more advanced in ossification of bones.(15)
 - E. Reach maturity at an earlier median age.(15)
3. *Socially and emotionally*, the gifted child, in relation to other children, tends to:
 - A. Show superiority in desirable personality traits; (13) be more courteous, cooperative, obedient, willing to take suggestions; be better able to get along with others and have a keener sense of humor.(12)
 - B. Possess a superior power of self-criticism.(12)
 - C. Exhibit greater trustworthiness when under temptation to cheat.(1)
 - D. Show less inclination to boast or overstate his knowledge.(1)

- E. Receive more opportunities as leader, up to 150 IQ; beyond that point, to have ideas and interests that are too advanced for his peers; (12) work and play alone more often, above 160 or 170 IQ. (12)
- F. Have the same type of play interests and activities, *in general*, but frequently to have play preferences that reveal a level of interest two or three years beyond his age norm. (26)
(Level of interest may exceed level of activities actually engaged in, because the child's motor coordination is more closely related to chronological age and physical development than to mental maturity.)
- G. Show a greater preference for games involving rules and systems—complicated games requiring thinking. (He has more information about such games also.) (26)
- H. Enjoy the same outdoor games which are preferred by average children. (12)
- I. Prefer sedentary, relatively quiet games *in the absence of stimulation from others*. (12)
- J. Create more imaginary playmates, in the case of the younger gifted child. (13)
- K. Prefer playmates older than himself, children of his own mental age. (12)

Interests

The interests manifested by intellectually superior children in their reading preferences and hobbies sometimes indicate giftedness. In some instances, home conditions, the school program or both may not have provided opportunity for cultivation of special interests. But gifted children studied in a number of situations have shown a tendency to prefer certain areas of reading and activity.

In the field of *reading*, these preferences, covering a wider range of interests than is found among unselected children, are:

1. Science, history, biography, travel, folk tales, informative fiction, poetry, drama. (Less interest in adventure, mystery, and emotional fiction than exists among other children.) (27)
2. Encyclopedias, atlases, dictionaries, and other compilations of classified information. (15)

As a group, gifted children soon outgrow children's literature and frequently turn to adult books and magazines. Their interest in comics declines earlier than that of their classmates. (29)

At the age of eight or nine, gifted children spend three times as many hours per week reading as their peers.(27) At all ages, they are avid readers.

The books reported in 1934 by Witty and Lehman to be the most popular with gifted girls and boys of ten and one-half years summarize the reading preferences of the gifted:(30:30-32)

BOOKS MOST POPULAR WITH GIFTED BOYS

<i>Huckleberry Finn</i>	Twain
<i>Treasure Island</i>	Stevenson
<i>20,000 Leagues Under the Sea and Other Stories</i> ..	Verne
<i>Mystery Stories</i>	Poe
<i>Americanization of Edward Bok</i>	Bok
<i>Life of David Crockett</i>	Crockett
<i>Autobiography</i>	Franklin
<i>The Pathfinder</i>	Cooper
<i>Roughing It</i>	Roosevelt
<i>All About Electricity</i>	Knox

BOOKS MOST POPULAR WITH GIFTED GIRLS

<i>Little Women</i>	Alcott
<i>Hans Brinker</i>	Dodge
<i>The Prince and the Pauper</i>	Twain
<i>Treasure Island</i>	Stevenson
<i>Jungle Book</i>	Kipling
<i>Vanity Fair</i>	Thackeray
<i>Seventeen</i>	Tarkington
<i>Home Book of Verse</i>	Stevenson, Ed.
<i>Jeremy</i>	Walpole

A more recent report of the reading activities of a group of eighth- and ninth-grade students of 120 I.Q. or above includes a list of adult books that might also interest bright children in the upper elementary grades.(14) The books were selected by teachers in the fields of art, music, English, literature, science, and social studies. (The children read books of their own choice from the selection and met twice a month for informal discussions with teachers. It was found that they could read on a higher level than previously, that they enjoyed and improved in interpreting what they had read, and that their interests had widened.)

The following books were among those used in the project: (14)

<i>Modern Arms and Free Men</i>	Bush
<i>The Economy of Abundance</i>	Chase
<i>The Story of Painting</i>	Craven
<i>General Social Science</i>	Finney
<i>The Art of Plain Talk</i>	Flesch
<i>Roosevelt in Retrospect</i>	Gunther
<i>Mythology</i>	Hamilton
<i>The Philadelphia Lawyer</i>	Pepper
<i>Autobiography of Ben Franklin</i>	Perry
<i>Works of Edgar Allan Poe</i>	Poe
<i>At Home with Music</i>	Spaeth
<i>Economic Roads for American Democracy</i>	VanTil
<i>On the Wisdom of America</i>	Lin Yutang
<i>The Business of Life</i>	ZuTavern and Erickson

The *activities* preferred by gifted children show a greater diversity of interest than do those of average children. The hobbies that are most favored include:

1. Collecting. (More collections are of scientific interest—shells, insects, minerals, coins, etc.) (13)
2. Playing musical instruments. (13)
3. Reading. (13)

Other interests actively pursued by the gifted are:

1. Dramatics. (13)
2. Religious activity. (13)
3. Scouting and campfire activities. (13)
4. Debating.
5. Study of ancient history.

A study of the *relative* intellectual, social, and activity interests of gifted children, as compared with a control group, revealed the following pertinent facts: (27)

1. Ninety per cent of the gifted group equalled or exceeded the mean of the control group in intellectual interests (defined as knowing rather than doing, getting at meanings); 84 per cent exceeded the mean of the control group in social interests (defined as interest in persons); no material difference existed between the two groups in activity interests (defined as doing things, participating rather than watching).

2. With increasing age, there was a considerable advance in intellectual interests among the gifted, only a little advance in social interests, and no advance in activity interests.
3. No sex differences in intellectual interests were found, but girls surpassed boys at nearly all ages in social interests, and boys surpassed girls in activity interests.

A knowledge of the interests displayed by gifted children in general is helpful to the teacher, but in studying the individual child she will want to determine his particular interests and utilize this information in planning his educational program. In the case of young children, a conference with the parents or an informal conversation with the child will reveal his out-of-school activities. At the intermediate-grade level, other techniques can be employed either in lieu of the interviews or in addition to them. Many teachers use an interest inventory in their classroom as part of a concerted study of the total group and its individual members. The gifted child's special interests are easily identified in this manner. Also, his social relationships are broadened when the teacher learns that some of the other children share one or more of his interests. Often the child needs to share an interest and to work on a project involving classmates who have less intellectual ability but who possess skills whose value he needs to recognize. Leadership, the ability to follow, and increased understanding of others can be developed in such a situation.

The most effective inventories are devised by the teacher and constructed on the basis of her knowledge of the home and community. The inventory may be limited to questions which simply identify out-of-school interests and activities. Or it may be more comprehensive for the purpose of revealing the social setting in which the activities take place.

The following questions might be included in the less comprehensive interest inventory:

1. Suppose you could listen regularly to only three radio programs. Which would you choose?
2. Suppose you were to be given the three books you have enjoyed most. Which would you choose?
3. Suppose you were to be given three phonograph records of any music you like. Which would you choose?

4. Suppose you could see three movies over again. Which would you choose?
5. Suppose there were only three games played at school. Which would you choose?
6. Suppose you could have any hobby in the world? Which would you choose?
7. Suppose you could see regularly any three television programs. Which would you choose?
8. Suppose you could have three wishes come true. Which would you choose?

The broader survey of interests might include questions such as these: (30)

1. What five things do you like to play best?
2. Is there anything you like to do better than play?
3. Would you rather play by yourself or with other children?
4. To what clubs or organizations do you belong?
5. What do you do in your club or clubs?
6. Do you take any special lessons outside of school? What kind? Do you like them?
7. Is there another kind of lesson you would prefer to take?
8. What tools or toys do you have at home?
9. How often do you go to the movies? With whom usually?
10. What are the two best movies you have ever seen?
11. What stage plays have you seen?
12. Have you ever been to a concert?
13. Do you enjoy reading? What are some books you have been reading during the last two months? What books do you own?
14. What newspapers do you read? What sections do you like best?
15. Name your favorite magazines.
16. What things have you been doing the past two weeks just because you wanted to?
17. Suppose you could have three wishes which might come true. What would be your first wish? Your second wish? Your third wish?

Special Talents

Special talents, as related to giftedness, are the subject of dispute among psychologists. Some regard such skills as functions of general intelligence channeled into specific areas. Others hold that general intelligence and special abilities are more or less independent elements. There is agreement, however, that outstanding *creative* achievement in a special area is accompanied by high general intelligence. (18)

This concept is embodied in the definition of giftedness set forth in the opening pages of this chapter.

Performance is the best basis for identifying children gifted in special areas such as music, art, mechanics, science, and writing. Creative potentiality in painting, stories, social behavior, construction projects, and problem-solving procedures is demonstrated as early as the preschool years of the child's life. Parents and adults associated with young children in the community should be alert to "symptoms" of creativity and should either utilize existing channels or initiate procedures that will assure the continued development of young talents. In the school the assistance of specialists in art, music, and mechanics is often available to teachers for developing techniques of skillful evaluation of children's work or for confirming the appraisals already made. The services of these trained school personnel might be extended to the community in order to strengthen the total identification program.

Ways of working, as well as the products of a child's talent, may offer clues to superior ability in some cases. The child who attacks a problem with originality and shows ingenuity in locating sources of information and organizing the facts he has gathered, or the "born leader" who demonstrates unusual abilities in working harmoniously with his classmates—such special qualities may reveal creativity, the most telling evidence of giftedness.

The child's environment must afford opportunities for these abilities to "come out." It must supply the materials, the time, and the encouragement to enable him not only to discover *latent* special interests or abilities, but also to reveal *real* talents. An important part of the teacher's role, then, in identifying the gifted child with special talent is to provide experiences in the classroom which will make it possible for his abilities to be revealed.

A listing of the innumerable activities in which the teacher may observe the talents of the gifted child would resemble a course of study. The wide variety of experiences and media of expression needed are basic parts of any classroom program planned around the growth and development characteristics of children and their individual abilities, interests, and needs. Some of the activities that will serve the teacher in this phase of the identification process are:

1. Creative writing (prose and verse).
2. Creative music and rhythms.
3. Original plays and dramatizations.
4. Murals and individual paintings, drawings, and cartoons.
5. Science experiments and demonstrations.
6. Construction of models.
7. Oral and written reports.
8. Free time in which to explore, choose activities, experiment.
9. Reading choices; interpretation of and reaction to content.
10. Planning for an excursion or an interview with a visitor.
11. Summarizing conclusions after an excursion or interview.
12. Committee work.
13. Collecting information and organizing it for use.
14. Participation on the playground, in clubs, in student projects.

Attitudes and Values

The child's performance in subject-matter areas, social relationships, creative expression, and in the fields of his special abilities help the teacher to judge his giftedness. In addition to observation of achievement, other techniques are available for gaining insight into the child's social-personal development. They do not identify the gifted child in the same sense that objective measurement and subjective judgment do. They indicate to some extent the level of the child's social and emotional maturity, and they point up needs arising from underdevelopment and/or maladjustment in these two areas.

The sociogram. This instrument reveals the interrelationships within a group, furnishes a clue as to the group's acceptance of or resistance to the gifted child.* It provides an indication too of the relationship he feels—or desires—with members of the group. True, the sociometric choices are restricted to a specified number of associates for a given activity, and they are made at a particular time. Under these conditions the resultant preferences suffer certain limitations. However, the choices constitute a more reliable gauge of what the individual child *really* wants than does his observed behavior. The choices the child seems to make in the classroom do not reveal his true feelings as well as do his written sociometric choices that he knows will be held in confidence.(3)

* For detailed information regarding the use of sociometric techniques in the classroom, see: *Sociometry in Group Relations*, published by the American Council on Education, Washington, D. C., 1948.

The implications in the use of sociometric test results for the study of the gifted child's social-personal needs are manifold. A need for help in strengthening his physical and social skills is indicated if he receives no choices at all as a participant in a game or party. If he is chosen by a number of his classmates as a desirable helper in some study-project, it is evident that his ability in that area is recognized and respected. The teacher can plan ways of utilizing this acceptance to extend and enrich his social relationships and attitudes if those are his particular needs.

The gifted child's choices of associates are equally significant in revealing his personality and adjustment. The children he chooses are those to whom he is emotionally drawn; it has been found that when allowed an opportunity to be with them, the child generally shows more maturity in his behavior, acts more intelligently, and broadens his attitude toward them as fellow-group members.(3) In furthering the teacher's understanding of the gifted child's skills and needs, sociometrics contributes to other types of evaluation in the identification program.

One of the limitations of the sociogram is its failure to reveal *why* the child chooses as he does, or why others in the classroom choose or do not choose him. Such information would enable the teacher to identify more specifically the attitudes and values upon which the choices, both of the gifted child and his peers, are based. The sociometric interview, a private conversation with each child, yields such information, but it is successful only if rapport between the teacher and the children is high. To give honest responses to her queries, they must have deep confidence in her sincerity and her trustworthiness. Such faith evolves from a background of past experiences that have proved her integrity.

Other child-study techniques. The personal attitudes, values, and feelings that motivate an individual's behavior may be identified by other techniques; the teacher may find some more effective in a particular situation than others. She has to select on the basis of many factors pertaining to the group, the individual child, and her own skills and personality. Some techniques are designed for the study of individual children and others for use with groups. The responses rendered in groups are sometimes useful in pointing up facets of the

gifted child's personal development, his relationships with the classroom group, and their reactions to him not previously revealed.

The various techniques are briefly described below. Professional literature dealing with group behavior of children and mental health in the classroom will furnish the more detailed information that some teachers may need.

1. *Diaries*: Accounts of the child's activities during a specified period, such as a week end, the morning hours before school, or the after-school hours. Emphasis should be placed on the kinds of activities, the people with whom they are carried on, the time devoted to each, and the setting, *i.e.*, the child's own home, friends' homes, or a community facility. (10)
2. *Autobiographies*: Narratives that may take an unstructured, freely written form or be organized to follow an outline presented by the teacher. A questionnaire is sometimes used. The most significant information is that which discloses the child's values and the events which he considers the most important in his life. (10)
3. *Open Themes*: Written expressions of the child's feelings and opinions regarding such topics as:
 - "Things to Improve About Myself"
 - "What Person Would I Like to Be? Why?"
 - "My Best Friend"
 - "Things I Would Like to Change at Home"
4. *Reaction to Pictures*: The children's responses to photographs or magazine advertisements dealing with boy-girl relations, child relations with adults, and the like. The children answer such questions as "How would you feel if you were this girl?" "What would you do if this happened to you?" This discloses the motives they ascribe to different types of behavior for people of different ages. (10)
5. *Reaction to Stories*: The children's responses to a situation set up by the teacher in brief story form. She asks questions such as those suggested under No. 4. (10)
6. *Anecdotal Records*: Brief objective recordings by the teacher of occurrences in the classroom which indicate the individual's relationships with the group, the group's reactions to the individual child, changes in relationships, incidents that precipitate changes, etc. This is a running record covering a period of several weeks or months. (10)
7. *Time Samplings*: Notes describing a child's relation to the group during a one- or two-hour period. The child's actions at noted intervals (9:10, 9:18, 9:30, etc.), the other children involved, and the interaction that results are described. (10)

8. *Sociodramas*: A role-playing situation in which individuals "live through" an experience of common concern to the group. Personal feelings related to the role that is being enacted and to the total problem-situation are revealed. Sociodrama is a projective technique. At the early childhood level, similar expression is accomplished through dramatic play.(3)
9. *Discussions*: The group's evaluations of behavioral situations occurring in the classroom and on the playground. If the teacher is adept in guiding such discussions and in analyzing responses, this technique gives insight into the values and attitudes held by individual children.(10)
10. *Three wishes*: A statement of the three things the child would like most to have or do if any three wishes could be granted.

It must be emphasized once more that high rapport between teacher and children is essential to the effective use of most of these techniques. Only honest expression of *real* feelings and thoughts are of value in analyzing the individual child's social-personal development. The teacher will want to exercise thoughtful self-evaluation before undertaking the application of these techniques.

OBJECTIVE EVALUATION

Tests of intelligence, aptitude, and special abilities are useful in singling out those who show unusual ability in the trait which the instrument measures.(18) Standardized tests constitute an integral part of the identification program, but their effectiveness in disclosing the originality and creativity that are basic elements of giftedness is limited, if operative at all. Since the tests measure only specific abilities in given traits, skillful interpretation of the results is essential. Another general limitation is that available tests are not very reliable at the early age levels in identifying the gifted child.(1)

Recognizing both the value and limitations of objective tests, many educators feel that these techniques should be used to supplement identification through performance and should be administered only after the child's ability in some particular field has been demonstrated.(1) This principle has merit; its observance may serve to de-emphasize the disproportionate importance placed upon superior intellectual ability in the concept of giftedness.

Intelligence Tests

An extensive review of professional literature dealing with the identification of gifted children reveals that intelligence tests are employed universally, with the scores serving in some instances as the sole criterion of giftedness. It will be recalled that creativity has been postulated as the cardinal characteristic of giftedness, and that high general intelligence is a component of true creative achievement. Intelligence tests, then, are used in identifying those specially gifted in science, mechanics, the arts, and human relations, as well as those generally gifted with high intelligence. No one test measures all types of giftedness and the many kinds of mental behavior they represent; therefore, not *all* the gifted children in a group will be identified by any of the current tests of general intelligence.⁽¹⁾ In general, the tests identify only those possessing high verbal intelligence, and they fail to disclose originality or creativity.⁽¹⁾ However, they *are* objective in nature; when administered by a skilled technician, they are the best instrument available at the present time for identifying children of superior mental ability.

The relative values of group against individual tests must be weighed in any testing program; they merit serious consideration in planning the identification program. The group test serves best as a survey instrument, but an individual test is generally preferred for appraising and diagnosing the mental abilities of any single child. School systems often use a group test for screening purposes, and administer individual tests later to those children whose scores deviate considerably from the median in either direction.

The individual test has value in diagnosis and analysis because it provides more accurate and valid measure of the child's intelligence, which is significant in the case of the gifted child. A group test may show an I.Q. of 140, while an individual test might reveal a 120 I.Q. With only the former score available as a criterion of ability, there is danger that the child will be pushed toward a higher performance than he is capable of achieving. By the same token, the teacher might accept work of a lower level than the child's capacity permits if he had tested below his real ability on a group test and had taken no individual test to supplement it. (Of course certain factors operate to in-

fluence a child's responses to test situations, and these will be noted later.)

The most widely used individual intelligence test is the Stanford-Binet. It is utilized in selecting students for the Major Work Classes in Cleveland, to be described in Chapter III, and has been employed in a number of other situations reported in this monograph.

The relatively new Wechsler Intelligence Scale for Children is another effective individual test. It is regarded by some psychologists as superior to the Stanford-Binet in identifying gifted children. Its merit lies in the fact that it provides a qualitative as well as quantitative index of mental ability, and thus furnishes data pertinent to an analysis of the child's development which are not available from other tests. The scale consists of six verbal and six performance tests, with an I.Q. for each of the two factors and a total, or Full Scale, I.Q. The materials used in administering the test are easy to handle and conveniently marked for "on the spot" scoring.

The interpretation of test results is as important as the selection of the test. Teachers who have used test scores to improve the instruction in their classrooms are aware that the cultural background of some children puts them at a disadvantage in that the words and situations used in the test are unfamiliar.(11) Physical illness, emotional blocks, the child's previous experiences with tests, his reaction to the person giving the test, his cooperativeness and the quality of his performance at the particular time the test is given are other factors that influence the score. It is for this reason that other kinds of information are so important, as in some instances it may not be possible to get a test score relatively unaffected by these factors, even by re-testing.

Opinion as to the score that distinguishes the gifted from the general school population varies among school systems. Authorities do not agree, in terms of I.Q., on their definition of intellectual giftedness; in the absence of a better principle, designations to date have been made on a purely arbitrary basis.(11) As has been noted, Terman, in his study, designated 140 I.Q. as the dividing line, and the Cleveland Major Work Classes require an intelligence quotient of 125 or above for admittance.(8) Some school systems classify as gifted all students with an I.Q. of 110 and above.(18) Others specify a percentage of the total population, such as the top 1 per cent or the top

10 per cent in intellectual capacity. The top 1 per cent includes, roughly, pupils with an I.Q. above 137, while the top 10 per cent covers all those over 120 I.Q.(11)

Achievement Tests

It is a shocking fact that many gifted children, in terms of achievement, are the most seriously retarded pupils in our schools today. Both Terman and Hollingworth concluded that they are apt to work far below their potential capacity.(1) Bearing these facts in mind when using achievement tests and interpreting test scores, we may expect many gifted children to score lower in educational age than in mental age.(12)

Such findings, which are of profound significance to the classroom teacher, may not be revealed in her evaluations of the children's abilities based on her observation of their achievement. She may be aware that they are working far beyond the level of their classmates, including those older than themselves, but without some objective measure of their maximum achievement level, it is not possible to know how much *more* they are capable of doing. Or perhaps she feels that they *are* capable of a higher quality of work, in which case the achievement test scores would serve to confirm her judgment.

Of course, it is possible that the children's best achievement will not be reflected in the test if the factors previously mentioned as conditioners of response to test situations are operating. The curriculum also may account for lower performance. However, if allowance is made for these factors, the achievement test retains its value as an instrument of objective measurement, for the child's performance is one of the more reliable evidences of his ability.

As to the areas in which achievement is to be measured, it is reasonable that all of the subject-matter fields should be covered. A battery test is useful for this purpose. It is desirable that the gifted child's strengths and weaknesses be identified and that the degree of his advancement or retardation be determined. Uneven development of abilities and achievement in the various areas is characteristic of the gifted. Study of the scores of each section of the test is of more value than consideration of the total score alone.

If battery achievement tests are given at regular intervals, as in

many school systems, the particular group test that is found to be the most reliable in any particular situation would, in all probability, be a suitable instrument for measuring the gifted child's achievement. However, some authorities feel that it is impossible for some gifted children to attain a score on the standardized tests that is commensurate with their high mental test scores, because the achievement tests are based on curriculum materials developed for children of average ability.(12) This problem may apply only to the highly gifted children. If there is evidence that the test being used is inadequate, another selection would be desirable.

Some schools may prefer to follow the same procedure in testing for achievement as is used in measuring the intelligence of their gifted children: namely, the administration of a group test followed by an individual test for those children who score considerably above their grade level or chronological age. An individual diagnostic test in one or more of the curriculum areas, such as reading, social studies, arithmetic, or language, would reveal specific strengths and weaknesses, and thus provide a more thorough analysis of achievement. Again, the testing program that is adopted would be determined by the philosophy and policy of the school system; but the desirability of a comprehensive analysis of the gifted child's total development, both potential and achieved, should be borne in mind.

Aptitude Tests

The individual intelligence test, with supplementary information, identifies those children who are gifted in the area of abstract thought, or intellectual ability, and indicates also the intelligence of those whose special abilities lie in the artistic, social, and mechanical fields. In no case, however, should a high I.Q. alone be utilized as evidence of giftedness in any one of these areas just because creative achievement carries with it a high level of intellectual ability. Although creative geniuses in art *are* highly intelligent,(1) all individuals who are superior mentally are not necessarily talented in art. As a matter of fact, studies have shown a low correlation between tested intelligence and musical or artistic ability.(1, 7) The correlation in the case of language, mechanics, and arithmetical calculation is higher.

As a supplement to the mental tests, aptitude tests are useful in

identifying children who are gifted in special areas. The outstanding abilities of these children may have been demonstrated in various classroom activities, and the aptitude test can provide further evidence of talent that should be developed. It serves to supplement both observation and measurement of mental ability.

Tests of aptitude for children of elementary-school age are relatively limited in number and kind. Because they have not been used as extensively as intelligence and achievement tests, most teachers are unfamiliar with their form, content, and aims. Therefore, a review of tests useful in identifying children gifted in special areas has been made, with brief descriptions of those that seem most practical from the standpoints of cost, administration and interpretation, and usefulness at the elementary-school level.

First, a few conclusions based on the general review of all available tests may be helpful:

1. In general, the tests measure performance or achievement rather than talent, though some claim to be "talent tests." (It is doubtful if all of the elements of talent are tangible and measurable.)

2. Many of the tests measure only one of several abilities involved in a particular talent. (Artistic talent is an example, as will be revealed in the description of the test.) In such tests evidence of one of the abilities does not mean that other abilities involved in the talent are always present.

3. There is question as to the relationship between the functioning of abilities in the test situation and in a normal situation that is not highly isolated. (Do these abilities operate in the same degree outside the test situation as they do in it?)

4. At the elementary-school level, none of the tests should be expected to predict adult success in the field. They merely measure ability as reflected in the level of the child's performance; some are more effective than others in measuring capacity as well as achievement.

Music. The following test is given the highest appraisals by specialists in measuring musical aptitude. It is one of the best known of all aptitude tests.(28)

SEASHORE MEASURES OF MUSICAL TALENT

Revised Edition by Carl E. Seashore, Don Lewis, and Joseph G. Saetveit.

Series A for children and adults; norms for grades five and six, seven and eight, and adults. (Series B for musicians and prospective musicians.)

Records are played and the subject enters answers on special blanks.

Test measures separately: sensitivity to pitch, intensity, time, timbre, tonal memory, and rhythm. (9)

Available from: RCA Manufacturing Co., Inc., Camden, N. J.

Cost: \$9.00 per album of six records, including manual and 200 test blanks. (\$.50 per manual, \$.40 per 200 test blanks, \$1.50 per record.) (6)

Art. The validity and reliability of tests of artistic aptitude have been said to be too low to permit final judgment of talent. (9) However, tests for the measurement of *some* art abilities have been devised; two are described here as examples. It is interesting to note that Norman C. Meier, co-author of the first test, has concluded on the basis of extensive biographical and experimental studies that artistic talent lies in six traits: fine eye and hand coordination, energy and concentration, intelligence, perceptual facility (keenness of observation), creative imagination, and aesthetic judgment. (9) The following test measures the last-named trait.

MEIER ART TESTS: I. ART JUDGMENT

By Norman C. Meier and Carl E. Seashore.

One form for grades seven to twelve and adults.

One hundred plates, each bearing a pair of pictures, one of which appears as created by the artist, the other altered to reduce its artistic merit. The score is based on the number of unaltered masterpieces chosen. (28)

Test measures: aesthetic judgment, regarded by the authors as one of the most important factors in artistic competence (if not *the* most important factor). However, one critic claims the test measures sensitivity to design, only one of several factors of aesthetic judgment. (6) Another critic points out its failure to measure ability in using media. (9) (Two other tests for measuring creative imagination and aesthetic perception may be available now.)

Available from: Norman C. Meier, Bureau of Educational Research and Service, State University of Iowa, Iowa City, Iowa.

Cost: \$.75 per book of test pictures (which can be used repeatedly), \$.10 per examiner's manual, \$2.00 per 100 answer sheets, \$1.00 per specimen set.

TESTS IN FUNDAMENTAL ABILITIES OF VISUAL ARTS

By Alfred S. Lewerenz.

One form for grades three to twelve.

A battery of nine tests, in three parts, to measure artistic ability (28) and likelihood of success in drawing and painting. (9)

Test measures: preference for design, drawing a sketch to fit a pattern, locating proper position of shadows, art vocabulary, reproducing a form from memory, correctness of perspective, and color matching. (9)

Available from: California Test Bureau, 3636 Beverly Blvd., Los Angeles, Calif.

Cost: \$2.40 per 100 test blanks of Part I and Part II, \$3.60 per 100 test blanks of Part III, \$7.00 per color chart, \$.35 per manual, and \$.50 per specimen set. (28)

Mechanical skill. Tests of mechanical aptitude, for the most part, are designed for use in selecting trainees or in vocational counseling; few are available for children of elementary-school age. Those which are designed for younger children suffer the same shortcoming noted in the Meier Art Test summary—only one of several component abilities is measured. The following tests seem the most appropriate for identifying specific aptitudes in mechanically gifted children.

REVISED MINNESOTA PAPER FORMBOARD TEST

By Rensis Likert and William H. Quasha.

Two forms, A and B, for age nine and over.

Test consists of sixty-four items of multiple choice type. Each item presents in pictorial form various parts of a geometric figure, followed by five assembled figures. Subject selects figure that represents the correct combination of the parts.

Test measures: ability to think spatially in two dimensions, an evidence of mechanical and engineering aptitude.

Available from: Psychological Corporation, 522 Fifth Ave., New York 18, N. Y.

Cost: \$1.35 per 25 tests, \$.50 per specimen set. (6)

STENQUIST MECHANICAL APTITUDE TEST

By John L. Stenquist in 1921 and 1922.

One form, two parts, for grades six to twelve.

Test I: ninety-five problem pictures relating to common mechanical objects which require the matching of related parts.

Test II: material similar to that used in Test I, as well as cutouts of machines and machine parts about which the subject answers general questions.

Test measures: potential mechanical ability. Portions of Test II prob-

ably test mechanical comprehension beyond mere information. The test does not measure manipulative ability; more recent tests might yield better measure of potential ability.

Available from: World Book Co., 313 Park Hill Ave., Yonkers 5, N. Y.

Cost: \$1.20 per 25 test blanks of either part, \$.35 per specimen set. (6)

Science. There is no test suitable for measuring scientific aptitude at the elementary-school level. It is probable that teachers would be able to detect giftedness in this area in the child's responses to science questions and problems included in the battery achievement tests used in the identification program. The originality and inventiveness shown in experiments performed in the classroom and the science materials which the child reads with understanding would furnish further evidence, but objective measurement would not be available to support the teacher's observations.

Personality Inventories

In the total study of the gifted child, identification of personal traits contributes vital information for guidance in the areas of social and emotional development. Almost all children benefit at one time or another during their school careers from the help rendered by a teacher or counselor, and many gifted children face adjustment problems of a special nature.

Consideration of positive factors, such as leadership ability, resourcefulness, responsibility, and initiative is of equal importance. The teacher may observe these characteristics in the child's day-to-day activities in the classroom, but some instrument of objective measurement might reveal qualities not manifested in overt behavior. It is a well-known fact that children sometimes repress maladjusted behavior, either consciously or unconsciously; the disclosure of concealed feelings and personal characteristics would broaden the teacher's understanding of each child's development and needs.

However, the objective measurement of such intangible qualities as feelings and personality traits is to be approached warily. The rating scale, personality test, or inventory of personal traits—whatever the instrument may be called—is essentially a device by which an individual is compared with a norm established on the basis of the behavior of

varying numbers of individuals. It is doubtful if "normal behavior" can be so identified and established. Thus the value derived from the comparison of an individual with such a norm is questionable. Furthermore, there might be a high degree of subjectivity in the examiner's evaluation of the subject's responses.

Reviews of rating scales and personality inventories reveal that the standardization procedures in some instances are subject to question from the standpoint of sound scientific principle, and that the claims of the instruments' reliability are not adequately supported by scientific research.

The limitations inherent in objective tests in general have been indicated elsewhere in this book, for these factors must be recognized in interpreting test results and in basing important decisions upon those findings. In the area of the child's personal development, the need for caution in the use of objective measures is even greater, because damage can accrue from misguided action undertaken with the utmost sincerity but on the basis of unreliable information.

A social maturity scale that has received the favorable appraisal of specialists is presented with a plea for thoughtful reservations in accepting the results of any such personality evaluation. It is a behavior description form rather than a rating scale, and it is a superior instrument from the standpoints of objectivity and standardization.

THE VINELAND SOCIAL MATURITY SCALE

By Edgar A. Doll.

One form, Experimental Form B, for subjects from birth to age thirty. A comparison of the subject's behavior with an age scale of characteristic behaviors, standardized for normal persons from birth to adulthood. Judgments are recorded by the examiner after a detailed interview with the subject himself or with a person well acquainted with him. (28)

Scale measures: the degree of social maturity as shown in personal responsibility and social participation. Scale yields a raw score, an age score, and a social age, the latter corresponding to the MA of Binet-type scales. (9) Author states that as much care should be used in mastering the test as is given to acquiring the technique of the Binet scale. (28)

Available from: Educational Test Bureau, Minneapolis, Minn.

Cost: \$3.00 per 100 record blanks, \$1.00 per manual.

SUMMARY

The variety of instruments and techniques described in this chapter indicates the comprehensiveness of information that is needed to identify the gifted child. Some of this information is gained through subjective evaluation; i.e., observation of his performance in many areas of activity, evaluation of his personal and mental traits, identification of his special interests and talents, and study of the attitudes and values he holds. Objective measurement must be utilized, as well. Tests of intellectual ability, scholastic achievement, talent, and social-personal development supply additional data.

Intelligent interpretation and study of the information thus gained is the basis of effective planning for the gifted child's total development. A program that assures his balanced growth and optimum performance will be geared to his individual abilities, interests, and needs in all areas; and every resource available to the school should be utilized to determine them.

Special Problems of the Gifted Child

THE major studies of gifted children in the elementary school show that as a group they are equal or superior to the general population in emotional maturity and ability to adapt to conditions they cannot change.(1) Superiority in these areas may be attributable in part to their capacity for self-diagnosis. On the basis of the studies made by Terman, Witty, and Hollingworth, it seems reasonable to conclude that both their physical vitality and mental ability enable them to cope better with stresses and strains and to attack personal problems more intelligently.

However, many gifted children experience serious difficulties in meeting life situations. Social and emotional maturity are not inherent in giftedness. Their high intelligence gives them insights that may be helpful in solving problems, but it often is the source of a keen sensitivity which compels them to face problems not ordinarily met by average children.

BASIC SOURCES OF PROBLEMS

In addition to the developmental tasks which are faced in varying degrees by all children, the gifted sometimes encounter unique problems as well. The unfavorable reaction of some peers and adults to their superiority offers one example. The frustrating limitations often imposed by the discrepancy between their advanced intellectual level and their less accelerated physical, social, or emotional development are another source of disturbance to some gifted children. The curriculum that fails to challenge superior abilities or to provide for individual interests sets the stage for still other problems.

These and other factors frequently hinder the normal adjustment of the exceptional child and, in some cases, actually block creative productivity. Guidance in understanding his conflicts and frustrations can help him achieve an all-round development and function at his optimum of productivity. Adults who are in a position to provide guidance must be aware of the problems that originate in the home, the school, and neighborhood groups. They must offer sympathetic understanding and thoughtful counsel as they work and play with gifted children. They must remember that the basic needs of the gifted, primarily those of normal children, are sometimes denied normal satisfaction.

An examination of several classroom situations will point up the kinds of problems that gifted children sometimes face and the resulting conflicts and frustrations they experience.

The Case of Jim

Jim is a fourth-grade pupil, 140 I.Q., an avid reader, interested in science, and superior in scholastic achievement. Because he has read widely and has had many extracurricular experiences, his knowledge and interests are broader than those of his classmates. He has exceptional ability in verbal expression. Being well informed and quick to respond, he has dominated most of the class discussions. In recent weeks the other children in the class have shown impatience with his ready responses and consistent superiority in all classroom work. They show signs of feeling "outdone," and they have been less friendly toward Jim. The teacher's daily praise of his work intensifies these feelings.

As the children's rejection of Jim has progressed, the teacher has noticed that Jim spends more time outside school with older children. One day he invited two boys from the seventh grade to go home with him to see his science laboratory. But these new relationships are not continuing. Jim seems lost and appears to be withdrawing both in the classroom and on the playground. His own classmates do not regard him as companionable; he talks about things they have neither done nor read about, and he surpasses them in everything they do in the classroom. Furthermore, the older boys with whom he has tried to make friends do not include him in their games or treat him as one of "the gang"; he is not as big as they are, or as strong, and

he is not a good ballplayer. Jim himself doesn't seem to enjoy them as he did before. He does not seem to be "with them" in informal conversations around the school. On several occasions he has been observed walking away to spend the remainder of the noon hour alone.

From this point on, Jim's behavior may take one of several turns. Let us examine two. He may withdraw further and pursue his intellectual interests in science and reading, alone. He enjoys these activities and derives real satisfaction from learning new facts and experimenting in his laboratory at home. On the other hand, Jim's natural need for status and prestige with his peers may be so great that he will continue to outshine them in class and thus use his superior intelligence in much the same way that a "bully" uses his physical prowess. He may enjoy adult approval, for the teacher always praises his accomplishments. As far as his classmates are concerned, Jim can feel secure in his position of intellectual superiority because they are unable to compete.

The Case of Sally

Then there is Sally, another bright child, who is seven years old. Her parents are of superior intelligence, and they recognized her accelerated development in her early childhood years. They have sought to enrich her background by taking her often to the museum, to children's concerts and plays, and on trips with them. She spends much of her free time reading, devoting the other hours to piano lessons and practicing. Sally has no brothers or sisters; although there are young children living in the neighborhood, she has little time to play with them. Her mother explains that Sally seems so to enjoy doing things with her that she doesn't really need friends of her own age.

The teacher's picture of the child, however, is somewhat different. In the classroom Sally is tense, exacting, and overly anxious to succeed. She seems to be fearful that her stories will not be "good enough," and she is seldom satisfied with the easel pictures that she paints. In group activities she seeks out one or two children with whom to work; she takes little part when in a larger group that is involved in a discussion or project. On the playground she is awk-

ward in games. Unless the teacher is directing the play activities, she runs to the swings or stands aside, watching the others.

The teacher is observing Sally closely, listening to her conversations with other children, and noting their reactions to her in the classroom and on the playground. She is also studying the information available in the cumulative record folder in preparation for a conference with Sally's mother. The latter has asked the teacher that the child be skipped to the third grade. She feels that Sally is capable of doing more advanced work; her vocabulary and reading ability are far above second-grade level, and her store of knowledge is exceptional for her age (she can name all of the states in the United States and many of the capitals.)

The Case of John

John is a sixth-grade student who has been the source of much concern to his teacher because of the quality of his classroom work and his disturbing attitude. Miss Brown has reviewed his cumulative record and found test scores that indicate exceptional scholastic ability and high achievement in the subject-matter areas. The quarterly reports of his last two teachers, however, show only mediocre achievement in the classroom and low ratings of attitude and behavior. The school records reveal no health problem or evidence of home conditions that might account for the wide discrepancy between ability and performance.

Miss Brown recalls that John seldom completes an arithmetic lesson; his written work abounds with errors of a most elementary nature. His assignments in general are carelessly and hurriedly done, if done at all. He is inattentive during group discussions and distracts the children sitting near him. When the teacher attempts to draw him into the discussion with a pertinent question, he feigns ignorance or gives a foolish, irrelevant answer that is intended apparently to be amusing to the rest of the class. John wastes time at his desk and wanders about the room at will.

Miss Brown has talked with him on many occasions, sometimes appealing for his cooperation and at other times demanding that he remain after school until he completes the day's assignments. John has complied, of course, but with an attitude of quiet hostility toward

Miss Brown. This feeling has persisted recently and has carried over into the classroom.

Despite Miss Brown's earnest efforts throughout the semester, John has not changed; he continues to be a source of disturbance in the room; his work has not improved, and his attitude of indifference and sullenness remains. Miss Brown admits that she "has tried everything, but just can't reach him." She has asked the guidance supervisor to work with her and is preparing a summary of her observations to be submitted with the referral.

Problems Arising from Environment

The three situations just described exemplify some of the basic sources of gifted children's adjustment problems. Out of context, they may be identified as follows:

1. Classmates' resentment of the gifted child's scholastic superiority and the adult approval that it brings. (Jim)
2. The teacher's tendency to emphasize and reward academic achievement and her failure to recognize the value of skill in manipulative activities, music, art, and social relations.(12) (Jim)
3. The teacher's lack of sensitivity to the children's reaction to the gifted child's accomplishments, and her failure to build with the group an understanding of differences in ability. (Jim)
4. The discrepancy between the gifted child's intellectual development and his physical and social maturity. (Jim)
5. Parental pressures for acceleration; pushing the child's development and performance.(1) (Sally)
6. Overcultivation of intellectual interests at the expense of physical and social development. (Sally)
7. Unreasonable expectations of social maturity equivalent to intellectual rather than chronological maturity. (Sally)
8. Overstructuring of leisure time (piano lessons, etc.) allowing insufficient opportunity for free activity and social relationships with peers. (Sally)
9. A curriculum that does not stimulate the gifted child's intellectual curiosity, challenge his abilities, or provide opportunity for self-expression and development of special interests. (John)

Other sources of conflict and frustration for the gifted child may be found in these environmental factors:

1. Resentment and minimizing of the gifted child's exceptional abilities by parents and siblings.(7)

2. Parental indifference to giftedness and absence of stimulation in the home.
3. Intellectual differences between the child and his family which deprive him of rich intra-family experiences based on common interests and mutual appreciations, and which make him feel he is a misfit. (7)
4. The increasingly higher standards set by the home and school as the child's abilities unfold. (12)
5. Exploitation of the child's gifts by the home, school, and community. (Contests, awards, programs, broadcasts, and competitive events of various kinds.)
6. The teacher's jealousy of the gifted child's abilities, which often surpass hers.
7. Undue acceleration in school, creating difficulty for boys in establishing heterosexual relations. (Girls being more mature socially than boys, the difference between levels of development is accentuated by the boys' acceleration.) (1)

The behavioral responses of gifted children to these elements in their environment vary. Jim's social withdrawal from his peers or his intellectual aggression against them—whichever pattern he follows—and John's "playing down" of his real ability in the classroom illustrate different reactions to environmental frustrations. Sally, on the other hand, has not yet found a means of dealing with her problem of fulfilling her parents' expectations and of being able at the same time to work and play freely with other children. She is displaying the compulsion to succeed and the anxiety which she feels. Other children than Jim, Sally, and John might show some of these behavior characteristics:

1. Docile acceptance of unchallenging school work; uncritical obedience. (12)
2. Active rebellion against school work and school authorities. (12)
3. Conceit and smugness; intolerance of those less able to achieve.

Problems Arising from the Child's Inner Feelings

Underlying the overt behavior of the gifted child are basic needs and desires common to all individuals, and feelings that result from the reaction of others to his precocity. There are certain unique feelings as well which are a part of his life experience. The inner drive to accomplish, for example, exists in most though not all gifted individuals. Often exceptional ability in itself motivates outstanding achievement. (1) But whatever its nature, the drive is strong enough in

some cases to enable the individual to overcome the most adverse conditions. By the same token, if he is denied the opportunity to develop his ability and thus to satisfy the urge to accomplish, frustration results.

A feeling of aloneness often assails the gifted child because of the differences between the interests and activities of his age-mates and himself.(1) The higher his mental age, the wider the gap and the greater his loneliness will tend to be. The child of higher I.Q. is the one who most often withdraws to solitary pursuits. According to Terman, the social problems of this group are more acute in general than those of the moderately gifted.(1)

A feeling of inferiority, too, often pursues the exceptional child.(1) He is unable to participate as an equal in games either because he has been more interested in intellectual activities and has not mastered the needed skills or because his associates (if he chooses to be with older children or has been accelerated in school) are more mature in physical development and motor coordination. Socially, his interests are not the same as theirs if they are older. Nor can he feel at ease with children of his own age if he has not had the social experiences of normal children. Adult expectations of maturity and performance beyond his achievement also create a feeling of inferiority.

Another feeling apt to be intensely experienced by the gifted child is that which results from his concern with the meaning of the world and his destiny in it.(1) From early childhood through adolescence, these questions can be the source of considerable stress. Often his emotional maturity is not equal to the intellectual maturity that prompts his concern with origin and immortality, and he is not able to resolve his anxiety without the insightful guidance and understanding of adults.

THE ROLE OF GUIDANCE

Guidance in the gifted child's social-personal adjustment is not confined, of course, to those instances in which his problems have become acute. Sympathetic understanding and wise direction should function from the preschool years to maturity, dedicated to the child's attainment of optimum development in his total growth. The problems described earlier in this chapter indicate that the mentally gifted need not be social misfits. Contrary to popular opinion, they are not

doomed to maladjustment. (13) Antisocial personality develops only if the home, school, and community fail to provide opportunity for all children in terms of their individual abilities, needs, and interests.

Helping the Child Gain Social Skills and Emotional Stability

Studies show that the areas in which gifted persons are most likely to fail are those of social relations and meeting frustrations constructively. (1) Interpreted in terms of the gifted child's needs, this statement furnishes adults with two objectives for the guidance they must offer—emotional stability and social development. Growth in these areas has its roots in early childhood experiences. Parents and, later, teachers must provide opportunities for social relationships and help the child develop the skills and understandings needed for effective participation. His emotional maturity can progress as he is helped to recognize and accept his emotions, find satisfaction in relations with others, respect others whose abilities and interests are different from his, and set attainable personal goals.

Social activities. The experiences from which the gifted child derives social skills and emotional stability do not differ from those that promote the same growth in the normal child. If the home, school, and community provide a balanced program of social activities rather than one overemphasizing intellectual interests, he may never develop the social and emotional problems that have been identified as possible areas of failure.

Children endowed with special gifts want most of all to be like others and to have friends. (1) Allowing them to live normally through each stage of development and to enjoy with others the experiences that are the right of every child should not be a special privilege. This need not interfere with their accelerated development in a particular area. Normal play experiences in childhood should parallel the development of any special abilities. Only then can real social and emotional maturity evolve.

Setting attainable goals. Another factor basic to good mental health has been mentioned earlier in relation to emotional stability—the setting of worth-while, attainable goals. The gifted child is usually aware of his superiority in certain activities, both in and out of school. There is no valid reason to conceal or disguise the fact. It is more important that he accept his giftedness in its true significance and

realize the obligation that it carries. He must be helped to see his responsibility to develop his gifts for the welfare of mankind as well as for his own happiness.

This concept of service to society need not be adopted with a patronizing attitude. The development of *every* individual's abilities for the welfare of the group is a democratic principle that is practiced in many classrooms today; the broader concept of service is simply an extended application of the same principle. From the drive to use his talents and to achieve, he may derive a capacity for purposeful planning. The value of goal-setting may be learned in the classroom through group and individual activities. Developing *personal* goals is a next step. By enabling him to utilize his natural tendency to be self-critical, the teacher can guide the child toward constructive self-evaluation and the setting of attainable goals. At the elementary-school level, such goals would emphasize standards of achievement and quality of performance commensurate with his ability. The gifted child must be helped to work up to full capacity in both respects. He must be guided to adopt these standards as his own functional goals.

SUMMARY OF SUGGESTED PROCEDURES

A review of some constructive and preventive measures that may be employed in dealing with the special problems of the gifted child will summarize the discussion. The home, school, and community share the responsibility for providing them.

1. Direction toward a normal childhood, with rich experiences in all areas (physical, social, mental, and emotional) which contribute to normal growth and development at the child's chronological age level. A wide variety of materials must be available for exploring, discovering, and developing abilities and interests to full capacity. They must be challenging to his particular level of interest and ability and stimulating to his intellectual curiosity.
2. Demands for performance commensurate with the child's abilities and maturity; in no case, expectations that exert unreasonable pressures.
3. Direction in the development of the skills needed to implement the child's special abilities—study skills, work habits, physical and social skills, use of the tools of creative expression, etc.
4. Encouragement of critical thinking, originality in executing ideas, and creative expression.

5. An accepting and understanding attitude toward the child's superiority and an awareness of the danger of minimizing or exploiting his talents; praise and encouragement of achievement, avoiding the over-emphasis of success which creates conceit.
6. Guidance which will enable the child to use his exceptional abilities in analyzing and meeting his social and emotional problems and in achieving all-round development; to realize the value of the full development of his potentialities for his own happiness and the welfare of society; and to develop a wholesome attitude toward his own gifts and the abilities and interests of others which differ from his own.

Current School Practices

TYPES OF PROGRAMS

THE question of how best to meet the needs of gifted children in the classroom is a controversial one. The kind of program adopted in any given school system is determined by such factors as the philosophy of education held by the administrators, teachers, and parents; the facilities and materials that are available; the size and geographical distribution of the school population; and the school and community personnel that can be utilized.

Acceleration

Acceleration has been the most commonly practiced method of adjustment for superior children, and in many instances it has proved to be satisfactory from the standpoint of the child's progress and development. Lewis M. Terman and Melita H. Oden compared school performances of accelerates and nonaccelerates whose intelligence and achievement were about the same. They found that accelerates did better in high school, more graduated from college, more graduated with honors, and more of those graduating continued to do graduate work. There was no significant difference between the two groups in social development either in childhood or in adult life. At the average age of thirty, the accelerates were more often in the "A" group for occupational success than were the nonaccelerates.(1)

There are objectionable features of acceleration that must also be considered. The most serious of these are the physical and social maladjustments that may result from a child's placement with others

who are older chronologically. He may share intellectual interests and activities with them, but he cannot participate as an equal in activities of a social and physical nature, and his emotional maturity does not match theirs.(1) It is thought, also, that the loss of fundamental skills and knowledges through "skipping" is a handicap. This can be averted by requiring the accelerate to complete the needed work before being placed in the next grade, but the adjustment problems caused by chronological displacement will continue to present difficulties of major import.

It would seem that thoughtful consideration of each individual case offers the best basis for deciding whether or not to accelerate the child. An intellectually superior child who is exceptionally well developed physically and socially can work and play with children who are one or two years older than he, but acceleration of more than two years makes for social maladjustments that can be detrimental.(18) In Terman and Oden's opinion no rule can be laid down regarding the amount of acceleration that is desirable, but nearly all children of 135 I.Q. or above should be promoted sufficiently to permit college entrance by the age of seventeen at the latest, with the majority benefiting from entrance at the age of sixteen.(1) This is particularly desirable for those whose preparation for a professional career requires two or more years of graduate study.

Special Classes and Interest Groups

Provision for gifted children through special classes ranges from an entire elementary "opportunity" school, as organized in one city, to a part-time program in which selected children spend a portion of each day with their own grade-group and the remainder of the day in a special class, doing independent research and other projects of an advanced nature. Between these two extremes fall the full-time classes which offer an enriched program featuring a greater variety of activities, individual projects, and research. Various designated as adjustment classes, opportunity classes, honor classes, or major work classes, they all seek to provide programs commensurate with the superior abilities of the gifted.

Special interest groups offer still other opportunities for the talented. They may be maintained in the school as a part of the enrichment

program or in the community under the direction of interested and talented citizens.

Examples of the types of programs noted above reveal the many different ways in which schools are meeting the needs of gifted children. The Hunter College Elementary School in New York City, a laboratory school for gifted children between the ages of three and eleven, illustrates the situation in which an entire elementary school is maintained for children of superior mental ability. The program is best described as an enriched program offering a wide variety of activities and instruction at the child's chronological age level. Acceleration is not practiced. Parents and teachers cooperate to provide weekly excursions to places of interest.(1)

The junior and senior workshops, as set up in the Colfax School, Pittsburgh, Pennsylvania, exemplify the part-time special class organization. Gifted children of grades one through three comprise the junior workshop, and those of the fourth through sixth grades make up the senior workshop. In the morning the children are assigned to their regular grade classrooms for brief exercises and homeroom type of activities; the rest of the time is spent in the workshop where a program of academic training and enrichment activities is carried on. These activities are correlated with those of the classes of their age groups. The atmosphere is informal and the children move about freely, consulting one another and working in groups under pupil-leaders. In the afternoon they rejoin their own age groups for special subjects, including art, music, science, library, gym, and swimming.(13)

The schools of Erie, Pennsylvania, initiated a part-time program for gifted children in September, 1951. Children of superior abilities are released from the regular classroom for one hour each day to pursue special interests and engage in intensive study. Two groups—primary and intermediate—are organized for the program.

Typical of the full-time special classes for the gifted is Cleveland's Major Work Classes plan, which has operated in both elementary and secondary schools since its inception in 1921. Children are selected mainly on the basis of intelligence (I.Q. 125 or above) and physical and social traits. Each class covers the year's work in the academic subjects for the particular grade, but less drill is required for mastery of tool subjects by these children than in the regular classroom. Individual instruction is utilized. A wide variety of activities is

organized around a large central unit, determined by the interests and needs of the group, and all possible teaching aids are utilized. The study of biography is integrated with the unit, and one hour daily is devoted to learning French. In the primary grades French games, songs, and dramatizations provide the basis for later study of the language. Literature and science are emphasized, creative experiences and numerous excursions are provided, and contacts with specialists in various fields are encouraged. Group discussions with pupil leadership provide opportunities to share research findings and exchange ideas. In addition to group study each pupil carries on an individual project of special interest to him and makes a presentation to the group, with discussion and evaluation following. Contacts with other children in the school are made through clubs, gym, chorus work, orchestra, and playground.(1, 18)

Another eastern city limits its special classes to gifted children of the fourth, fifth, and sixth grades. Intelligence and achievement tests are given at the end of the third grade; on the basis of the test results, children are admitted to the opportunity class as they enter the fourth grade. Since the children are able to cover the regular course of study in half the usual time, only the afternoon period is devoted to the curriculum material of the grade. The morning is spent in project work, which includes social studies, science, art, music, literature, and creative activities.

Special interest groups provide training for children talented in art, music, or writing. Sometimes they take the form of clubs dedicated to the pursuit of a special interest or hobby. Such groups meet in the school during school hours or outside of school on Saturdays, as the following examples show.

A number of city school systems have made Saturday art classes available to their students; in other instances the cooperation of public and private resources has offered similar opportunities to children with artistic ability. In one city the Carnegie Institute of Art offered space and materials for such an enterprise on the condition that the school system provide the instructor. The most gifted children from the fifth, sixth, and seventh grades were selected, and in a few years enrollment increased from the original twenty-five students to six hundred and fifty. Only those children who had more than average talent and who were able to profit from instruction beyond that given

in the regular school program were admitted. The technique and creative design shown in their work were extremely advanced.(18)

In Dayton, Ohio, an out-of-school choir for elementary- and high-school boys is sponsored by the Rotary Club. All races and creeds, all classes, are represented in the group. The choir is led by the supervisor of music in the public schools.(1)

In Worcester, Massachusetts, music and drama are combined in the girls' club open to girls from nine to fourteen. The club's activities are directed toward the annual spring presentation of an operetta. Specialists in drama, music, and dance train the girls, and parents provide costumes.(1)

In smaller communities similar projects have been launched with instruction provided by local artists and musicians. In some cases special teachers of neighboring high schools and colleges have contributed their services to help children explore their special interests and talents and perhaps discover the field in which their lifework, or at least their avocational forte, lies.

One school system has introduced hobby clubs in its elementary schools and has organized groups from the fifth and sixth grades in fifteen of its schools. Clubs devoted to choral work, creative writing, art, science, and dramatics are made up of members selected by the children, with the assistance of the principal and club advisors, on the basis of strong interest and unusual ability in the particular activity. The clubs are directed by teachers of exceptional ability, and meetings are held once each week during the afternoon school session in a central meeting place in the school district.(18)

Enrichment in the Regular Classroom

In the special classes described in the preceding section, enrichment of the curriculum for gifted children is accomplished by providing a greater variety of activities and materials, more independent study along lines of special interests as well as group study of a broad unit of experience, and greater opportunity for creative expression. The same program can be applied in the regular classroom, where the learning experiences can be geared in variety and depth to the gifted children's abilities. However, description of such programs has not appeared in professional literature, and solicited reports

of current practices in the elementary schools reveal that these enrichment programs appear only sporadically.

The public schools of Santa Barbara, California, are developing an enrichment program for gifted children of both elementary and secondary grades. Children of 130 I.Q. or above were the subject of special study. As a result of this two-year inquiry, many of the elementary-school children studied were accelerated one year. (Further acceleration was not recommended.)

Enrichment of a qualitative rather than quantitative nature is provided in the regular classrooms in the Santa Barbara school system. Specific activities are planned for the gifted on the basis of case studies revealing the extracurricular resources used by the children, their interests and hobbies, and their personality problems. Activities are related as much as possible to the unit problems being studied by the rest of the class. The school works closely with parents, through individual conferences and group meetings, to further parental understanding of the children's needs, the school's objectives, and the parents' role in enriching the gifted child's experiences.

Another example of this type of program is one that was initiated in both the elementary and secondary schools of a town of 10,000, in order to provide for the individual differences of *all* pupils and to permit each to progress at his own rate. As a matter of fact, the procedure proved to be more effective in meeting the needs of superior pupils than those of other groups.(18) Instruction in arithmetic was individualized and each pupil worked at full capacity, much of the time in a directed-study situation. Individualized and group study were combined in the social-studies area through a one- or two-day introductory period which prepared the children for study of the unit. This was followed by individual study, with groups of two or three students of similar ability occasionally working together on some special phase. At the end of the allotted time the entire class spent a day or two summarizing information and drawing conclusions.

The program provided real enrichment of the curriculum for gifted children, whose rapid progress was evidenced by their coverage, in some instances, of five to ten times as much material in the work period as was required of the remainder of the class.(18)

Another example of enrichment is that which a gifted eight-year-old girl received in a one-teacher school situated in a rural county in

California. As a primary-grade pupil, the child participated in and often supervised the sharing period of her group in the morning, reading stories to the children while the teacher worked with the upper-grade group on social studies. She also read with the primary-grade children during their regular reading period and, later, joined an older group to read in a special area of interest such as science. She worked successfully with the older children in such activities as construction, contributing original ideas although she lacked the muscular coordination required to implement them. She also participated in writing a play that was prepared by the class as a culmination activity. She composed the dialogue and the older children did the writing, since she had not yet mastered the mechanics of writing rapidly.

A multigraded school situation such as this presents many opportunities for the gifted child, because the program is usually planned around a center of interest which allows participation by children of varying levels of ability.

UNDERLYING POINTS OF VIEW

Acceleration

Advocates of acceleration regard this procedure as the best means of providing the superior child with educational experiences that challenge his intellectual abilities. Placement with older classmates of more mature mental ability is thought to improve the gifted child's motivation, prevent him from developing careless study habits, and permit him to complete his professional training and marry at an earlier age.(1) Time thus saved can be of benefit both to society and to the individual since the productive period of his life will be lengthened and the cost of his education reduced.(11)

Teachers undoubtedly recall instances in which superior children have evidenced boredom during class discussions and work periods, either completing assignments hurriedly and sloppily or not doing the work at all. Their performance has seemed to be consistently below their known ability level, and their attitudes not only have been detrimental to their own behavior but also have affected those of the entire class. Such children might be better challenged by work of an advanced level, and if provision for their abilities cannot be

made in the regular classroom, acceleration would seem to be the answer.

However, this action implies that the intellectual welfare of the child is our sole concern. Mention has been made earlier of the social, emotional, and physical aspects of acceleration, and most educators consider these phases of the child's development along with his mental ability. Also, we must give thought to the following question: Does working at a higher grade level and mastering a more advanced *content* assure the full expression of the gifted child's powers? Discussion of the characteristics and interests of these children has pointed up other needs which acceleration alone does not necessarily satisfy.

Special Classes and Interest Groups

Those who recommend special classes for gifted children believe that this type of program insures the fullest educational and personality development. Inasmuch as instruction in the regular classroom is usually geared to average ability, the children of superior capacity are often neglected and unchallenged. Their interest lags, and they develop undesirable attitudes and habits of work because they are able to complete the work and master skill subjects in less time than the other pupils in the classroom.

When placed in a group of equally capable children, however, these children are stimulated to use their intellectual powers to a fuller extent because standards of achievement are higher.(11) Experiences calling for the use of more complex mental processes can be provided in greater number and variety; since these children learn more rapidly, less time needs to be spent in drill. More efficient work habits result from working at challenging tasks. Studying with intellectual peers reduces the likelihood of the children's becoming egotistical about their superiority.(11)

One of the basic principles of education in a democracy is equality of opportunity. Too often, equality of opportunity has meant identical opportunity,(8) and the superior capacities of the gifted have not been developed to the fullest because opportunity has not been provided in terms of individual needs. There is nothing so unequal as the equal treatment of unequals. The enriched program of the special class equalizes the gifted child's opportunities by recognizing and

encouraging his particular abilities in the same way that the physically or mentally handicapped child is enabled, through special education, to make the maximum use of his capacities. Special provision for the gifted child, then, is democratic in that it affords opportunity for the development of his distinctive capacities equal to that which is now afforded children of average and low ability.

The same principles apply to special interest groups which permit the child to cultivate talent in art, music, writing, science, mechanics, etc. Superior adult performance in these fields is often attributable to such enrichment and is as essential to the welfare of our society and to the self-realization of the individual as is the creative thinking contributed by the intellectually gifted.

Enrichment in the Regular Classroom

The philosophy supporting enrichment in the regular classroom emphasizes the social values inherent in heterogeneous grouping. This procedure permits children of varying abilities to work and play together, to share goals and plans, and to experience achievement through the utilization of each individual's particular abilities. Such a process parallels the real life situations of adulthood and provides the gifted child with valuable experiences in associating with others whose interests and talents differ from his own. Training in leadership and in the ability to follow is thus gained, together with respect for the dignity of the individual.(11)

The stimulation afforded the slower students by their brighter classmates is another factor held to be advantageous in the regular classroom organization.(11) It is perhaps equally important that through constant association with children of their own age and developmental level, the gifted can learn needed physical skills.

In summary, it is to be noted that enrichment in the regular classroom implies the same kind of program as that which distinguishes the special class—greater scope of activities, freedom to follow special interests, more opportunity to apply initiative and originality in developing a topic or project, experience in drawing conclusions and making generalizations, and more opportunity for expression of talent. Teachers will recognize these as exemplifying a good program for all children, as ways of meeting *every* child's individual needs and abilities. Differentiation of curriculum for the gifted lies not so much in

the *kind* of experiences provided as in their variety, depth, and advanced level.

It must be admitted that curriculum enrichment might be more easily achieved in a special class than in the regular classroom. Nevertheless, a realistic view of the current situation in the public schools suggests that special classes, if they are preferred, cannot be provided for a number of years. In the majority of school systems, classrooms are not available and funds for constructing and equipping new ones are not in sight. Until the financial stress imposed by a rapidly growing school population is alleviated, most school districts will of necessity be limited to a program of enrichment in the regular classroom. In rural districts and small communities, a further limitation to the special class approach exists. The total number of children may be so small that special classes for the gifted are not possible.

Practical considerations alone do not, in all probability, govern the schools' thinking on providing for its superior children; the policies of the district may lead the teachers and administrators to choose between acceleration and enrichment or to favor a combination of the two. The relative value of one over the other is controversial; but many experts, aware of the merits and disadvantages of the three programs just described, believe that programs combining moderate acceleration and enrichment in the regular classroom will best serve the welfare of gifted youngsters.⁽¹⁾ Such a program—a combination of acceleration and special provision in the regular classroom—seems especially appropriate for a number of reasons. But as with any educational program, wise decisions can be made only in terms of all aspects of each child's development.

An enrichment program in a regular classroom is greatly facilitated by such desirable features as the availability of adequate materials, smaller classes, and a flexible curriculum that permits some individualized instruction and time for the teacher to plan, study, and acquaint herself with a wide variety of resources in the school and community. Arrangements that permit the gifted child to use shops, labs, and other facilities in the school system on a part-time basis and to participate occasionally with classes of higher grade levels in his own school or in the junior or senior high school also enrich the regular classroom program. Organizing a small group of gifted children from a number of classrooms to study together for an hour each

day or even each week is another way of affording enrichment experience. All of these conditions may not prevail in any one school, but efforts should be made to provide the best program possible by utilizing all available skills and resources.

Suggested Enrichment Activities and Experiences

AIMS OF THE ENRICHED PROGRAM

"A PROGRAM of enrichment should permit each student to delve more deeply into his fields of special interest and to give creative expression to his particular talents; but it should also guide him to explore a wide variety of both intellectual and non-intellectual activities." (11:59)* This philosophy applies to the education of all children, the gifted and those of average or poor ability as well. It expresses some of the basic aims of general education. But a greater *scope* and *depth* of experience characterize the enrichment provided for the bright child. Providing "more of the same" in the way of activities fails to challenge him; the assignment of menial tasks, such as running errands, distributing materials, computing five extra arithmetic problems, and learning ten additional spelling words, is deadening and wasteful. New and varied content which furnishes more intensive contacts with people, the arts, and the problems demanding creative thought and critical analysis(25) are the essence of the program best suited to his needs and interests. These should be challenging to him and should provide soil in which he can grow.

The enriched program for gifted children emphasizes social adjustment and a sense of responsibility, creative effort, intellectual initiative, critical thinking, and unselfish qualities of leadership.(20) These specific aims can be restated as follows:

* Number following colon refers to page in reference cited.

1. Activities that teach community service and democratic attitudes; (8) participation in schoolwide projects, out-of-school contacts with the community, and observation of and participation in civic activities. (11)
2. Opportunities to share in undertakings and to learn the techniques of working with others toward common goals. (20)
3. Opportunities to work independently in planning, executing, and evaluating; (20) in utilizing critical analysis and original thinking; in practicing the scientific method of attacking problems; (8) in making generalizations from firsthand experiences and applying them to new situations. (11)
4. Experiences in creative expression; early introduction to the arts. (8)
5. Opportunities for exploration of new areas of experience—manual, recreative, aesthetic.
6. Experiences involving the use of varied materials of advanced level; opportunities for the extensive and intensive study of problems.

Such a program of enrichment necessitates adding content to the existing curriculum and also extending the child's sphere of activity from the classroom into the total school program and the community. It provides opportunity for independent activities and group experiences, for contacts with children and adults, for growth in intellectual abilities and in social-personal development, and for development of known talents and discovery of unknown gifts. It meets the individual needs and interests of the child and is geared both to his experiential level and his social and emotional maturity. The normal experiences and interests of childhood are not denied him, nor is his personality growth neglected, in the process of enriching his education program.

SUGGESTED PROCEDURES FOR THE CLASSROOM

Inasmuch as this book is directed to the teacher in whose classroom the total program of the gifted child is centered, the enrichment that is to be provided there will be considered first. The nature of enriching experiences has been noted in the preceding paragraphs. Attention must be given now to the setting in which they will function.

The Classroom Environment

The classroom environment, as one aspect of the setting, must be stimulating both in atmosphere and in wealth of available work materials and creative media. The teacher's interest in the gifted child's activities and findings, her encouragement of his efforts, the freedom

she provides for initiative and originality to function, her praise of his achievement, and her enthusiasm for his projected plans are vitally important elements of the classroom atmosphere. Other personal qualities that are desirable in the teacher will be treated in greater detail in Chapter V.

A variety of materials for research, experimentation, and recording of data, and a wide selection of media for creative expression also contribute to a stimulating environment. The teacher must be familiar with those materials at hand in the school system, as well as with sources of new and/or supplementary materials that can be procured. (The term "materials," as used here, includes all types of learning aids—models, specimens, maps, charts, graphs, films, recordings, transcriptions, filmstrips, and flat prints, as well as books, pamphlets, magazines, and other printed matter.) A knowledge of sources for specific kinds of information to meet the needs of special interests in science, mechanics, and the like is of untold value. A store of such knowledge can be built through the teacher's conscientious effort to be alert, inquire, see possibilities, and follow any and all leads toward useful resources. The teacher who is creative and experimental is not hampered by a school budget that prevents the purchase of special equipment for the gifted child's projects. She adapts and utilizes the common everyday materials available in garages, basements, and family "catchalls," and encourages similar resourcefulness in the children.

Her acquaintance with community resources, both human and material, and with the special talents and abilities of other school personnel also enables the teacher to broaden and enrich the experiences of her gifted pupils. In this way, the classroom environment extends beyond the walls of the school to the most remote corner of the community. A program of two-way participation can be established by enlisting the contributions of citizens in the classroom and by having the gifted child take part in selected community activities, drives, surveys, and the like.

The Unit Method

Teaching procedures are as vital as environment in determining the quality and effectiveness of the enrichment experiences provided in the regular classroom. In view of the variety of activities that con-

stitute enrichment (see page 49), the program built around a unit of experience is far superior to traditional methods in meeting the gifted child's needs:

1. In enabling each pupil to work at his own rate and level, the unit method with its large areas of interest affords him the necessary freedom for all the exploration, research, and creative expression of which he is capable. (18)
2. It permits him to work with others on group projects and to work alone in the areas of his special interests.
3. In the tool subjects his advanced abilities and rapid learning rate can be accommodated through individualized assignments at advanced levels (his own spelling list, arithmetical problems, etc.).
4. It provides opportunity for him to develop skill in using the scientific method to attack problems.
5. The firsthand experiences, observation, and experimentation furnish experiential background for making generalizations and drawing conclusions.
6. His all-round development is furthered by construction activities which allow him to manipulate tools and to create from a concept in the mind. (1)
7. Social-personal growth is promoted through experiences in planning, executing, and evaluating with others.
8. Leadership and the ability to follow are learned; social skills are developed.

In short, this type of program best enables the school to fulfill its responsibility to the gifted child by fostering initiative and originality and by guiding growth toward self-realization and service to society.

Enrichment Activities

A listing of some specific activities which have functioned in programs for gifted children provides an over-all picture of enrichment in the regular classroom. In planning a program for a particular child, the teacher will of course make selections and adaptations in terms of his individual interests, maturity, and level of understanding. Children of the primary grades, for example, will dictate their original stories and poems to the teacher, whereas older children will write them themselves. Those younger children who are accelerated in eye-hand coordination, however, might be able to write (in manuscript) original captions for pictures and bulletin-board dis-

plays. Their enrichment experiences would follow the pattern of those listed below but would be simpler and of a lower level.

The following are suggested experiences and activities that enrich the regular classroom program (note that some of the "independent activities," though developed and prepared individually, are to be shared with and/or reported to the total class; others represent the gifted child's special interests which may be beyond the understanding of the other children):

1. SCHOOL- AND COMMUNITY-SERVICE ACTIVITIES

- A. Making rules for conduct in the school building. (8)
- B. Planning and setting up displays in halls, offices, etc. Planning and working on a mural for the school building.
- C. Heading school drives (Red Cross, March of Dimes, etc.). (8)
- D. Organizing and planning a school hobby show, book fair, or folk-dance festival.
- E. Serving on school committees, student council, etc.
- F. Answering the office telephone, taking and delivering messages as relief for regular employees.
- G. Writing articles and editorials for the school and community newspapers. (8)
- H. Reading or telling stories to younger children.
- I. Scanning and classifying reading materials for the school library. (1)
- J. Setting up book displays; assisting the librarian with clerical duties.
- K. Participating in a community drive, survey, or poll.

2. ACTIVITIES INTEGRATED WITH GROUP PROJECTS

- A. Making models, drawings to scale, or reproductions to show the development of an invention, (8) to trace a series of historical events, and the like.
- B. Chairing committees.
- C. Leading class discussions. Summarizing class discussions orally or in written form.
- D. Interviewing classroom visitors (resource persons).
- E. Surveying community resources and planning class preparation for field trips.
- F. Making inquiries and arrangements, by telephone or letter, for exhibits on tour to be sent to the classroom. Locating and collecting materials in the community for classroom exhibits (pottery, shawls, tools, etc.).
- G. Writing requests for, selecting, setting up and maintaining materials for class centers of interest—science center, for example.

- H. Participating in a debate or panel discussion on a current issue(8) (with children of higher grades if the topic is beyond the interest of own classmates).
- I. Directing plans for a class party or other special event. Writing invitations and responses to invitations(8) for such enterprises.
- J. Devising new games; giving instructions and directing the game.(8)
- K. Singing descants (pitched high for girls, low for boys) while class sings melodies of songs. Kindergarten and first-grade children can play descants on song bells.
- L. Playing instrumental accompaniments for class singing.*
- M. Working on creative activities related to class projects (see "Creative Activities").
- N. Publishing a class newspaper.

3. INDEPENDENT ACTIVITIES

- A. Writing letters to foreign correspondents. Learning a modern language (conversational).(13)
- B. Writing requests for materials for own use.(8)
- C. Making oral or written reports of reading, observations, excursions, and experiments (factual).(8)
- D. Making oral or written reports of aesthetic experiences—concerts, plays, art museum (interpretive).
- E. Making charts, maps, graphs, drawings, dioramas, scrapbooks pertaining to experiments, observations, research reading, excursions, hobbies, etc.
- F. Preparing outlines for discussions.
- G. Studying and interpreting the history of classical pictures.(8)
- H. Conducting science experiments in school and at home.
- I. Using magazines, periodicals, newspapers as sources of needed information. Using card catalogues, *The Reader's Guide*, and reference books such as encyclopedias, atlases, *The World Almanac*, etc.
- J. Collecting and classifying materials for use in the classroom (class librarian).(8) Scanning and classifying materials for own use.
- K. Pursuing hobbies of interest. Making collections in connection with special interests.
- L. Reading books on advanced levels.
- M. Interviewing community residents—businessmen, city officials, etc.
- N. Studying topics such as:

Governments	History of own community, county, state
Parliamentary law	

* Music for instrumental accompaniments of selected songs in the State Music Series, *New Music Horizons*, can be found in *Instrumental Horizons*, published by C. C. Birchard Company, Boston, Mass.

- I. Writing descants for songs. Writing own instrumental descant to accompany class singing.
- J. Originating rhythms and dances related to a class study and developed from dramatization (rodeo including lariat throwing, horse breaking, etc.).
- K. Illustrating stories, plays, and poems.
- L. Sculpturing. Making models or reproductions.
- M. Making a mural for the classroom or school.
- N. Designing posters, advertisements, bulletin-board displays.
- O. Drawing illustrative sketches for programs and class books.
- P. Drawing a comic strip of some historical incident.
- Q. Making slides—art, science, books.
- R. Making puppets.
- S. Designing costumes and props for plays.

To suggest ways in which some of the gifted child's activities might be integrated with the regular classroom program, and to identify other projects that might be carried on independently, a section of a fourth-grade unit on "early California life" is outlined below with individual enrichment activities listed in a parallel column.

The special activities that might be carried on by the gifted child, either independently or as a member of a committee, are shown in the column at the right. Those on the left represent the problem areas that are expected to be covered by the class as a whole.

CLASS ACTIVITIES

Making field trips to historical landmarks in the community and nearby areas.

Reading and hearing about California myths and legends.

ENRICHMENT ACTIVITIES *

Making independent visits to the museum for background information.
Doing research to broaden background knowledge.

Interviewing historians, curators, early settlers for information.

Making independent visits to out-of-town landmarks (Sutter's Fort, Sacramento) and reporting to class.

Reading further in this area, at higher reading and interest level.

Writing a legend that is typical of the period, using own information and imagination.

* Selected items are from *Report of Workshop on Education of Gifted Children* (San Francisco: San Francisco State College, 1951), pp. 48-9.

CLASS ACTIVITIES

Listening to such radio programs as "California Stepping Stones," "Death Valley Days," "Romance of the Rancho," "This is San Francisco," etc.

Dramatizing incidents of early California history.

Studying early means of travel and comparing them with modern transportation.

Comparing the pioneer's and the present family's food, clothing, and shelter costs.

ENRICHMENT ACTIVITIES

Listening independently and reporting to the class.

Writing a dramatization of an historical incident suggested by the programs.

Writing a character sketch of Death Valley Scotty or another historical character.

Writing a diary of a child's life on the "Rancho."

Reading for information.

Interviewing historians and curators for information.

Doing research to find early songs for use in the play.

Planning costumes, props, etc.

Writing original songs and dialogue for dramatization.

Designing and making puppets if dramatization takes that form.

Planning an original dance to be used in the play.

Typing the dialogue for individual members of the cast.

Making models or dioramas of early forms of transportation.

Painting a mural showing the evolution of transportation in California.

Drawing to scale an early train.

Making a map showing early travel routes in this area and the highways and rail and air routes now used.

Computing cost of traveling a given distance in the early days and at the present time, presenting findings in chart or graph form.

Compiling budgets for a pioneer family and a present-day family of the same size, for a given period of time, computing increases in percentages.

CLASS ACTIVITIES

Comparing the Spanish and American measures: money, land, weights.

Playing games of the early California period.

Discussing the responsibilities of the pioneer father, mother, and children.

ENRICHMENT ACTIVITIES

Making up problems using Spanish weights and measures.

Making a chart showing the designs of early coins and comparing their values with those of our coins.

Collecting early coins.

Computing the cost of the school property (land) in terms of the land measures and monetary system of pioneer days.

Tracing the deeds by which the property has been transferred since the original land grant was made.

Looking up rules and directing the games.

Reading to learn lesser known amusements of children of that period.

Comparing these responsibilities with those of family members today; drawing conclusions as to differences.

Typical Daily Plan

Integration of the gifted child's activities and experiences with those of the class calls for careful planning by the teacher. Provision for his activities in the daily schedule will be determined by the content and level of the class learnings as related to his individual needs and projects at a given time. The gifted child, for example, may need to join the rest of the class in its study of the use of the semicolon or the process of long division. If he utilizes these skills effectively, however, he will not benefit from the presentation and practice; he can devote that time to some independent project.

To illustrate the manner in which the teacher might provide enrichment experiences for the gifted child in the daily program, a suggestive schedule is presented below. The alternative activities noted in the various subject matter areas point up the fact that the program would vary from day to day; the current needs of the gifted child will determine the activities he will pursue.

CLASS ACTIVITIES AND
EXPERIENCESGIFTED CHILD'S ACTIVITIES
AND EXPERIENCES*Social Studies* (9:00-10:00)

Planning

Participation in planning. Summarizing, recording class plans, committee personnel, material needed.

Work Period

Research (utilizing materials of higher reading level), making a model, preparing and typing a report, dialogue, or script, conducting a science experiment—carried on *independently or with a committee*, but contributing to the total class activity.

Evaluation

Participation in evaluation. (Same as planning, above.)

Reading (10:10-11:00)

Silent and/or oral reading, with discussion and related independent work activities.

Participation with the top reading group if his developmental reading needs warrant,

AND/OR

Independent reading in area of special interest (science, biography, history, poetry).

Physical Education (11:00-11:20)

Games, relays, self-testing activities.

Participation with classmates. Individual instruction in specific game skills, if needed.

Arithmetic (11:20-12:00)

Thought problems, practice of computation skills.

Individual work at his level to develop or refine skills needed for independent and group projects—computing percentage, measuring area, volume, distance, or time, studying metric system; drill *as needed* in computation skills; supplementary study pertaining to social functions of arithmetic; free time for pursuit of special interests.

CLASS ACTIVITIES AND
EXPERIENCESGIFTED CHILD'S ACTIVITIES
AND EXPERIENCES*Language Arts (1:00-1:50)*

Spelling, oral and written language skills, handwriting.

Individual work at his level to develop or refine skills needed for independent and group projects—compiling his own dictionary, studying techniques of specific kinds of writing (newspaper reporting, dialogue, science experiments); study to attain achievement commensurate with his grade level, if needed; free time for pursuit of special interests.

Creative Expression (2:10-3:00)

Music, art, rhythms, creative writing.

Developing individual projects in these areas; participating with the class; joining another class or group to pursue special interests.

Whether the child needs practice in arithmetic and language arts to achieve performance commensurate with his chronological age or to develop skills of an advanced level, he may be expected to learn in less time than the other children require. He will have free time, then, either for the entire period several days each week or for a part of the daily period. Such free time may be devoted to independent activities such as visiting community facilities, working in the library, interviewing resource persons, joining other classes for activities of special interest to him, working on school-wide projects, and the like. In the primary grades, of course, less time might be spent in activities outside the classroom because of the immaturity of the children and the possibility that more time will be spent with the class in mastering the fundamental learnings in the areas of language, arithmetic, and reading.

Development of Special Talents

Cultivating creativity in the arts. The enrichment activities suggested include opportunities for creative expression by children who are gifted in writing, art, drama, dance, and music, as well as for those generally superior in intellect. Teachers often feel more in-

secure in these areas; they seem to think that unless they too are endowed with talent, they are unable to work effectively with the talented children in their classrooms. As a matter of fact, the qualities that are most essential to the cultivation of creativity in these children are not at all related to literary or artistic giftedness. "Creativeness cannot be taught; it can only be released and guided." (2:1) The job of the teacher is releasing and guiding creativity rather than teaching and directing it. The receptive and understanding person who expresses genuine appreciation of the writing, painting, and music that children produce is the best teacher for children with special talents.

To be receptive, the teacher must accept the child's creation as an expression of a *child's* ideas without imposing her adult standards and interpretations. To be understanding, she must prove herself a friend, for when the child has found her worthy, he will share and express his personal thoughts and feelings through writing and other media of expression, knowing she will understand the meaning he wishes to convey. To be truly appreciative of his creative efforts, she must print his writing, post his picture, have his song sung. Praise and recognition are essential.

Developing aesthetic awareness. The cultivation of creative ability is abetted by certain procedures as well as by teacher attitudes. The teacher must take time to appreciate with the children such everyday things as clouds racing across the sky, trees changing color, smells and sounds that might go by unnoticed, birds that perch on the limb of a nearby tree, and the textures of fabrics, fruit, and other common objects. Sensory experiences are particularly conducive to original expression. A classroom program that is rich in areas of interest and thought-provoking activities provides ideas; and creative expression starts from ideas.(2) Children must have experiences, feelings, and thoughts about which to write and paint—something, in short, to express.

Original expression need not be confined to ideas stemming from strictly aesthetic or sensory experiences; the portrayal of rhythm and motion and line can result from observing a grader or bulldozer at work on the street, children skipping rope, or workers hammering nails. Awareness and appreciation of poetic and artistic stimulants

are further developed by hearing good music, prose, and poetry, and by seeing good reproductions of paintings.*

Given the experiences out of which ideas and feelings originate, the child needs time to think and perhaps discuss his thoughts with others. Sharing ideas may open up new channels of thought. However, some gifted children do not need the experience of sharing and should be given freedom to write or paint or compose music independently. (A relaxed and permissive atmosphere within a flexible schedule is essential to creative expression.) Since some of their classroom experiences are individualized, opportunities for creative expression may occur independently of the group's activities. The gifted should be free to enjoy those experiences alone. At other times they may participate in creative activities with the class but perform at their own level.

Providing media for artistic expression. When creative expression takes an artistic form, a variety of media must be made available. A selection of materials is conducive to exploration, one of the objectives of enrichment for the gifted child. Originality in expression lies not only in choice of line and form and color, but in the media utilized in expressing feeling.

Instructing in the arts. The techniques that make for refinement in creative expression, whether in art, music, or writing, should be taught the child. Some individuals who are truly artists are not always careful with regard to details. In their cases, pride in attainment is a powerful incentive to improve techniques.(2) The positive approach which praises the good things keeps creative expression coming freely; when the story or poem or musical score is to be incorporated in a class book or presented on a special occasion, the desire to refine it should be manifested by the child himself. It must be remembered that the child believes his verse or song or clay figure is good; if told he must perfect it the spontaneous joy of achievement is gone and his creation is only work, schoolwork.(2)

Exploring references concerning the arts. The teacher who wishes to deepen her understanding of creativity in the arts can find many

* Art appreciation may be stimulated by the study of miniature reproductions from New York's Metropolitan Museum of Art collection. These cost \$1.00 per set of twenty-four miniatures (with albums) and may be obtained by writing to the Book-of-the-Month Club, Inc., 345 Hudson Street, New York 14, N. Y.

references in professional libraries. She needs to know what is expected in this area for normal children in order that she may recognize giftedness in talented children. She needs also to pursue further the general procedures that have been noted here. They apply to the creative endeavors of all children, whether gifted or not.

The following references are suggested:

Applegate, Mauree. *Helping Children Write*. Scranton, Pa., International Textbook Company, 1949.

Lowenfeld, Viktor. *Creative and Mental Growth*. New York, The Macmillan Company, 1947.

Association for Supervision and Curriculum Development, National Education Association. Chapter 5, "Fostering Creativity." *Toward Better Teaching*. Washington, D. C., National Education Association, 1949.

Mursell, James L. *Music and the Classroom Teacher*. New York, Silver Burdett Company, 1951.

Fox, Lillian, and Hopkins, L. Thomas. *Creative School Music*. New York, Silver Burdett Company, 1936.

Cultivating creativity in science. The interest and superior ability of some gifted children lie in the field of science. The release and guidance of creativeness by the teacher is as basic a precept in this area as it is in the arts. The mental abilities which are usually characteristic of most gifted children—generalizing, drawing conclusions, reasoning, and applying critical analysis—are particularly applicable to scientific study and experimentation. In providing problem-solving experiences that are functional, the science program furnishes opportunity for the purposive development and use of these abilities. Applying the scientific method at progressively higher experiential levels helps develop one of the fundamental skills that the gifted are to utilize as members of society. Such development is one of the aims of the program for gifted children.

The teacher's guidance of the exceptional child's science experiences will not differ much from that in the arts. True, the concepts with which the child is dealing may transcend the teacher's comprehension to a considerable degree. She may be less able to understand and share the pupil's interpretation of nuclear fission, for example, than to feel the motion expressed in a painting. However, she *can* lend encouragement and express interest; she can give him freedom to explore and experiment and think; she can suggest sources of information in books and qualified resource persons; and she can

recommend observation in appropriate community facilities. The gifted child who is deeply interested in science may be able to do a great deal for himself in setting up projects, procuring equipment, and conducting experiments. In most cases his natural intellectual curiosity, initiative, and originality will direct his course, and the teacher needs only to give him the time and freedom he requires to work at his own level.

Some of the gifted child's experiments may be correlated with the science interests of the class. They may represent a more complex application of a concept that the whole group is studying, or they may be related experiments that he has conceived independently. On some occasions he might make the equipment that is needed for a class experiment but cannot be purchased by the school. Or, as a member of a committee, he might prepare background information and assemble equipment for an experiment to be performed by the group. Other experiments might grow out of his own special interests. These would not necessarily be comprehensible to the other children but would be, instead, a part of his program of individual activities.

Suggested procedures in science. The child's advanced science interests might be integrated occasionally with class activities in the following ways:

IF THE CLASS IS STUDYING SOUND

THE GIFTED CHILD MIGHT:

Find out how phonographs produce sound, how the school public address system works.

Interview a member of a builders-supply firm regarding soundproofing materials; get samples. (5)

Visit a broadcast studio to examine soundproofing construction; report to the class.

Study and use the telephone mechanism in the Bell Telephone Company kit, available at local telephone-company offices.

Make a xylophone or flowerpot chimes, if a member of the primary grades. (5)

IF THE CLASS IS STUDYING

WEATHER

MACHINES

THE GIFTED CHILD MIGHT:

Set up a weather station on the school grounds to gather data on wind direction, air pressure, temperature, and the like (5) (using home-made instruments if commercial ones not available).

Visit a weather station and report to the class. (5)

Make a model of some piece of machinery of interest to him.

Visit an industrial plant and observe machinery in operation.

Examine a gasoline engine that has been torn down; observe it being reassembled.

In junior-high-school science textbooks the teacher may find additional experiments and activities that will challenge the specific interests of a gifted child in her room. The child who reads at an adult level can use current periodicals for information pertaining to atomic energy as well as to other scientific developments. A rather extensive bibliography of children's books appears in *Elementary School Science and How to Teach It* by Glenn O. Blough and Albert J. Huggett (The Dryden Press, Inc., New York, 1951), beginning on page 504. This volume presents some excellent experiments, with related subject-matter background, that may be useful to the teacher. It can be read by the gifted child in the upper grades as well. Charles K. Arey's booklet, *Science Experiences for Elementary Schools* (Bureau of Publications, Teachers College, Columbia University, New York) is a practical monograph which explains specific experiments and projects and presents descriptive diagrams. Though intended for use by teachers, it can serve as a reference for the gifted child.

Cultivating creativity in mechanical skills. Many of the activities that enrich the program for the mechanically gifted child tie in with science projects. This relationship is evident in the foregoing list of science enrichment activities. Other opportunities for developing mechanical ability are present in the construction projects of the social-studies program. The need for a device to simplify or speed up some everyday procedure in the classroom can become a chal-

lenge to the gifted child's inventiveness. Every teacher wishes for a more convenient way to store or "get at" materials. Why not mention such a device to the child and let him design and construct it? Freedom to originate, plan, select materials, and execute his project perpetuates creativity here just as it does in the arts and in science.

Observing the plant superintendent or head custodian as he repairs the heating system, installs a lighting fixture, or cleans the power lawn mower is another experience that is available in the school. Visits to repair shops, industrial plants, and business establishments utilizing machinery in different ways offer opportunities for observation in the community.

Other experiences can be provided through the use of facilities available at higher-grade levels in the school system; these will be noted shortly.

Cultivating creativity in social relations. Enrichment activities have been suggested for the intellectually superior child and for the child who is talented in the arts, science, and mechanics. Creativity functions also in social relations, and the child who demonstrates exceptional insight and skill in interpersonal relationships reveals another kind of talent. His giftedness is related to people, whereas the intellectual's is in ideas and the mechanic's is in things. This distinction does not deny that the outstanding leader possesses superior intelligence; he is often brilliant mentally. But high general intelligence alone does not necessarily make a person an effective leader; the belief that all bright children should become social leaders is a fallacy.

The sociogram. Sociometric studies have shown that the *highly* gifted are more likely to be followers than leaders; even in special classes and schools they tend to rank in the middle in terms of being accepted and rejected by their peers.⁽¹⁾ It has been stated that in the typical elementary school they have little chance of achieving group leadership. Leta Stetter Hollingworth's experiences led her to believe that leaders are likely to be more intelligent, but not too much more so, than the average members of their group. She observed that children with an I.Q. of 125 to 155 are sufficiently superior to the average intellectually to win the confidence of large numbers of their peers, but that those of 170 I.Q. and above are too intelligent to be understood by most persons with whom they have contacts.⁽¹⁾

In addition to intelligence, there are other factors that function in effective leadership. Social acceptance by peers is one, for children's sociometric choices reveal its importance in their appraisals of their classmates. The greater number of choices goes to the child with whom they feel comfortable, and he is not always the intellectually superior child. Nor is he always the child who is outstanding in the eyes of the teacher and the one she expects to be a leader.

Observing the gifted child in his relations with others. While the sociogram represents one means of discovering leadership ability, the observations of parents, teachers, and other adults are a valuable aid also. Such attributes as sensitivity to others' feelings and needs, the ability to plan and organize the activities of a group, the faculty to foresee the possible consequences of an act, and the willingness to give and take can be observed in children's play activities. Even young children demonstrate some of these qualities, although the egocentric tendencies of early childhood may influence their behavior in the direction of autocratic leadership. The qualities revealed by the potential leader are effective only insofar as they stimulate the thought and action of the group, and this response too can be observed in the play activities carried on in the backyard of the home, neighborhood recreation areas, and school grounds.

The classroom also provides opportunities for leadership ability to be manifested. Teacher-pupil planning, group evaluation of procedures and outcomes, problem-solving requiring group action, and many other experiences which are a part of the regular classroom program help reveal the creativity of the child who is gifted in social relations.

Guiding the gifted child in his social relations. Once discovered, the child's ability must be guided toward maximum development. The attitudes, knowledges, and skills needed for effective leadership are best developed through extensive experience in groups and through guidance toward a philosophy of service to others. Unless the child understands his role in society and the obligation it carries, and unless he derives a sense of achievement from constructive leadership activities, he is sometimes apt to seek needed satisfaction through socially undesirable experiences.

Working in committees in the classroom enables him to understand how the accomplishments of a group can transcend the performance

of its individual members, and how an individual allies himself with a group goal without losing his identity as a person. The teacher must help him to understand the leader's responsibility for eliciting the participation of group members and utilizing their abilities; she must guide him not to impose his preconceived ideas upon the group. Some gifted children need more guidance than others in achieving this understanding. Those who have been exploited or the subject of excessive recognition and reward might find it difficult to relinquish their pet ideas and "spotlight" position. Instruction in the principles of group process enriches their experiences and enables them to develop needed attitudes and skills.

Emphasis on the value of good followership must be provided in the child's study of group leadership techniques, for the group process points up the interrelationship between leading and following. Each member of a group functions both as leader and follower, and the gifted child must utilize his capacity for critical analysis in determining whom to follow, which ideas are false and unacceptable, and which course of action is the most sound. Development of the ability to follow intelligently, on the basis of proved fact and thoughtful analysis of all aspects of the problem, begins in the classroom with real situations at the child's experiential level. It is as essential for the teacher to help the gifted child grow in followership as to develop his leadership ability.

The contributions of the gifted, both as creative leaders and intelligent followers, are needed in all fields of endeavor. There is sometimes a tendency in our thinking to overemphasize the importance of leadership in the political field at the expense of other fields. Current events tend to strengthen our belief that we need superior intelligence in those who hold high government offices. But creative thinking and exceptional ability are needed equally in labor, industry, engineering, education, social welfare, and all other fields. Because of this, experiences that develop superior leadership in children must include situations involving ideas and things, as well as people. Opportunities for planning, arranging, and managing can be provided through undertakings such as the presentation of an original dramatization for a visiting class, the solution of a problem arising in the social-studies program, organized games, the construction of a grocery store, the cataloging and distribution of study materials, or

the purchase of some piece of equipment with funds derived from a cake sale. A wide variety of situations that give leadership experience in many fields is inherent in a good classroom program for children gifted in that area.

SUGGESTED PROCEDURES PROVIDED BY OTHER SCHOOL PERSONNEL AND FACILITIES

In some instances, the maturity of the gifted child's interests and the level of his performance are such that occasional association with older children and use of more advanced equipment and materials are needed. Teachers, class groups, and clubs in the upper grades of his elementary school or in the local or neighboring junior and senior high school can provide the increased breadth of experience that enriches his learning program. In selecting supplementary activities, the regular classroom teacher must consider the child's social and emotional maturity in relation to the developmental level of the older children with whom he participates. If the divergence is too great, even the bonds of a common interest and equal mental maturity can not span the gulf. This applies particularly to situations in which the individual child joins a sizable group of students, all of whom are considerably older than he. Work with individuals or small groups of two or three selected students might be more desirable in such a situation. In all cases, whether the arrangement involves a few junior- or senior-high-school students or an entire class, it might be wise to build desirable attitudes of understanding and cooperation in preparation for the gifted child's participation.

Enrichment Experiences

The activities to be selected are determined by the particular interests, talents, and abilities of the gifted child. Only a few of those listed below are appropriate for any one child; all are suggestive of the kinds of experiences that can be provided by the personnel and facilities of the higher grades.

1. Using the biology, chemistry, or physics labs, under the direction of the teacher or selected students, for performance of individual experiments.
2. Observing and/or participating in experiments performed by biology, chemistry, or physics classes.

3. Using machine-shop and woodwork equipment and tools, or mechanical drawing tools and supplies.
4. Using art equipment and materials—potter's wheel, photography supplies, plastics and other art media of an advanced nature—under the direction of the teacher or students.
5. Playing an instrument with the school orchestra.
6. Taking roles in plays and operettas.
7. Singing with the glee club or chorus.
8. Learning a foreign language through individual instruction by a language teacher.
9. Seeing educational films and observing demonstrations in the field of his special interest.
10. Attending special programs (featuring outside speakers) of clubs in areas of interest to him—science, mathematics, art, etc.
11. Hearing book reviews and discussions of literature in English classes.
12. Hearing class discussions of national, state, and local government, industrial development, transportation, etc.
13. Participating in surveys of community problems.
14. Presenting his own book reviews, science experiments, surveys and research, creative writing, mathematics projects, and the like, for evaluation and discussion.
15. Hearing broadcasts and discussions of current world affairs.
16. Taking field trips with classes in subjects of special interest.
17. Receiving guidance from teachers in advanced reading, creative writing, speech, drama, and dance.
18. Contributing news articles and reports to the junior- and senior-high-school newspapers.
19. Receiving guidance from the community *and* school librarians in:
 - Using reference materials and learning techniques for locating information.
 - Finding books of interest to him.
 - Broadening his interests through the discovery of books in unfamiliar fields.
 - Discovering new books and articles in the field of his interest.
 - Learning to browse and request direction.
 - Making collections of pamphlets and pictures.

SUGGESTED PROCEDURES FOR THE HOME AND COMMUNITY

The school alone cannot supply the wide range of activities needed by the gifted child. The home and community also must participate in making enrichment experiences and materials available. How-

ever, the school should assume leadership in establishing and maintaining any program in which parents, community organizations, and school personnel participate, because of the specialized services that it can render and the facilities and materials that are at its disposal. The Parent-Teacher Association plays a vital part through its program of work for the education of all children, the gifted included.

A cooperative program can function in identifying the gifted child, in furnishing parent education and in-service training of teachers, and in meeting the various other needs related to provision for the gifted child. The discussion here is concerned with only one aspect of the total program—the enrichment activities and experiences that might be furnished by the home and community.

The Home Environment

The home is the original source of stimulation and development for the gifted child's interests and abilities. During the preschool years his giftedness often becomes apparent in his accelerated progression through various developmental tasks and the maturity of his abilities, interests, and attitudes. Some parents are less able than others to recognize their child's superiority in these respects because they lack knowledge of child development. Some are less aware than others of his need for the experiences that help him to discover, develop, and use his talents. There are those parents too who either do not know how, or are not interested in providing for the child's needs, and there are others who resent and minimize his exceptional abilities. Parents may exhibit interest and a knowledge of needs, but they become overprotective, overanxious, or inclined to formulate goals that are beyond the child's aspirations and abilities.(24) One of the objectives of a school-home-community program might be that of building real understanding in parents of the significance of giftedness and the responsibility that it entails. Other areas in which many parents need help are those of providing a balanced life for the child, stimulating his intellectual curiosity and creative ability, assisting him in the development of human-relationships skills, and gaining information that will assure effective educational and occupational planning.

Before the child enters school, he should have opportunities to explore and sample a wide range of activities. This will help him to

discover interests and talents.(1) A home atmosphere that stimulates and fosters creativity is needed. Materials for learning—books, musical instruments, tools, crayons, paints, and mechanical toys—also are essential early in the child's life.(1) These elements of enrichment continue to be important after he has entered school, for his out-of-school experiences are a part of the total enrichment program, and they are carried on simultaneously with his classroom activities.

Specific Activities for Parents and the Community

Some specific experiences and activities which can be provided by parents are noted here; teachers who wish to plan a coordinated school-home program for their gifted students may find them helpful. The activities suggested for parents are determined, of course, by the child's interests and abilities and by the areas in which he needs developmental experiences—physical skills, social activities, and the like. The personal and financial resources of the home and the facilities of the community are other determining factors.

1. Visits to:
 - A. Museums, zoos, planetariums, and places of historical interest.
 - B. Municipal and international airports, power plants, transportation and communication centers, factories.
 - C. Medical and scientific laboratories.
 - D. City- and county-government offices, state-department offices.
 - E. Art galleries for special exhibits and lectures which are scheduled.
(Programs of coming events are available from the person in charge.)
2. Attendance at concerts and plays which are suitable for children.
(Adult programs are appropriate for some gifted children.)
3. Private lessons—vocal, instrumental, interpretive and ballroom dancing, art, and drama.
4. Trips by plane, train, boat, and automobile for pleasure and for some specific purpose, such as observing topography, operational methods and procedures, adaptation of man to his environment and of environmental conditions to man's needs.
5. Opportunity for discussion with adults who are employed in various vocations which are of interest to the child. Observation of their work might supplement the information gained through discussion.
6. Facilities available in the home, including:
 - A. A variety of general reading materials (at appropriate levels) and of special reference materials in the fields of the child's interests.

(These comprise magazines, newspapers, and bulletin subscriptions.)

- B. Materials and equipment for hobbies and collections.
 - C. A laboratory for science experiments, or workshop with tools and materials, or drawing table and easels, etc.
7. Social experiences with peers—formal and informal parties in the home and outside the home, trips with friends, hikes, camping experiences, etc.
 8. Membership in:
 - A. Y.M.C.A., ball club, or other local organization that provides training and participation in individual and group sports.
 - B. Boy Scouts, Sea Scouts, Air Scouts, or similar organization.
 - C. Dancing club, hiking club, science club, hobby club, choral or instrumental group.
 - D. Correspondence organization, such as the Junior Red Cross maintains with foreign correspondents.
 9. Use of the local library and the more extensive facilities of a city library.
 10. Family picnics, trips, and parties; participation of parents and siblings in a hobby, collection, or other interest (if the interest is mutually enjoyed); family reading of poetry, plays, and novels aloud; family discussion of independent reading, activities, and experiences.

The Community's Responsibility

The community needs to be made aware of its joint responsibility with the home for identifying the gifted child and providing experiences and activities before he enters school. As noted earlier, the home does not, in every instance, supply sufficient stimulation and opportunity for the exploration and cultivation of talents. The community must help,⁽¹⁾ and its participation in the total program is exceedingly important to the gifted child's development.

Activities for adults. The community's contribution begins with the activities it provides for adults. If parents have opportunities to engage in enterprises that foster self-expression—painting, playing music, participating in sports and dramatic activities—they may become more sensitive to the creative potentialities of their children.⁽¹⁾ The increased insight thus gained by parents can lead to stimulation of the gifted child's creative expression in the home.

Community programs for children. A planned program of varied activities for children contributes more directly than do adult activities to developing the gifted child's creative abilities. Summer pro-

grams offering experiences in weaving, drawing, painting, clay modeling, and recreational activities; year-round classes in drama, dancing, poetry writing, music, art, and sports; and organizations such as boys' and girls' choirs, hobby, sports, and ballroom-dancing clubs—these activities have been established in various communities. Some of them are appropriate for children of all ages, beginning with the three- to five-year-olds, and others are geared to the interests of specific age groups. All provide opportunity for the gifted child to develop interests and grow in social skills through experiences in working and playing with other children. Increased appreciation of talents and abilities differing from his own might also result.

Cooperation of specialists in the programs. In almost every community and school system, there are adults with special abilities and talents who are willing to serve as leaders or instructors of children's groups. These individuals can be identified and their interest enlisted by means of a questionnaire or survey. The cooperation of the Parent-Teacher Association, church groups, service clubs, public agencies, and business and professional organizations is invaluable in contacting the adult population of the community for such information. The school is sometimes able to reach only those adults whose children are attending classes, and broader coverage can be achieved by working through other groups.

School personnel who participate in many community programs include teachers and supervisors with special training in woodwork, mechanics, science, art, music, literature, drama, recreation, and the dance. In many situations the school contributes further by making its physical facilities available—classrooms, gymnasiums, auditoriums, playgrounds, and laboratories. The equipment and materials needed for particular activities are sometimes furnished also. Often the accommodations available in school buildings are supplemented by recreation centers and churches.

The following descriptions of some of the programs being carried on in communities throughout the United States illustrate the variety of activities that provide enrichment for gifted children. The organization and procedures employed may suggest action to be taken by the community and school in utilizing resources for the enrichment of the gifted child's experiences.

Typical Community Programs

A summer program was initiated in Lawrence, Kansas, several years ago, under the direction of the director of elementary-school art in the city schools. She was assisted by two advanced students from the university, and the subject was financed by the parent-teacher association and community clubs and organizations. As the program has grown, funds from the city's recreation council and community chest have been used to meet increased costs. Drawing, painting, clay modeling, weaving, and work with marionettes are provided for children from kindergarten through high school.(1)

The art museum in Worcester, Massachusetts, offers classes in art, beginning with a nursery class for three- to five-year-olds and continuing through adolescence. Art activities are provided for all children who show interest, and those who are talented are given special guidance.(1)

A public librarian in Dallas, Texas, personally interested in poetry, invited school children who enjoyed writing poetry to bring their work to the library on Friday afternoons. Two groups have been formed, one for elementary-school children, the other for high-school students. Each child reads aloud a poem he has written and participates in the ensuing discussion. The librarian helps the children decide whether their verse "sounds right" and suggests suitable poems for them to read. Each year the children select the best poems for publication in a mimeographed book, copies of which are sent to the school libraries and to the local newspaper for review.(1)

The Children's Theater in Palo Alto, California, gives children opportunities to develop dramatic talent and become familiar with scenery, lighting, dancing, and choral work. Sixteen plays are presented each year and no child plays the leading role in more than two performances. The emphasis is on fostering sound relationships rather than developing stars.(1)

In the Bay Area in California a number of Saturday art classes are available to children of elementary-school age. The De Young Museum and the California Palace of the Legion of Fine Arts in San Francisco offer classes every Saturday morning, with a trained instructor in charge. Age-groupings are set up, and many art media are used—clay, paint, cut paper, chalk, etc. In Oakland a ceramics

class meets on Saturday mornings at the public museum. It is organized on an individualized work basis. Children are asked to purchase their own supplies, which are available at cost at the museum.

A nature study class is also offered at the Oakland Public Museum. It meets throughout the entire year. The content is determined by the children's interests and is developed through discussion, informal lectures, and craft work related to the subject matter.

Free training in choral work is provided through the San Francisco Boys' Chorus and the Community Music School. Similar programs are maintained during the summer in Oakland and San Leandro, where a charge of approximately fifteen dollars is made for enrollment.

Group activities of the type described here will not be feasible in all situations, particularly in rural areas and small communities where the number of gifted children does not warrant the organization of classes. It might be possible, however, to utilize the special interests and abilities of citizens in other ways. Gifted children can gain much from meeting and talking with such persons singly or in small groups. Observing a woman weaving on a hand loom; hearing someone recite ballads, stories, and folklore, or sing songs; watching a person demonstrating the dances of his homeland; or just examining antique glass, china, or furniture are rich experiences for the child with keen interest in these areas.(18) The man who has a fully equipped workshop in his basement and the mechanic who operates the local auto-repair service can broaden the gifted child's knowledge of tools and motors. In every community, whatever its size, resources for enrichment are available. All of them should be utilized to the maximum.

CHAPTER V

The Teacher's Role

THE preceding chapters of this monograph reveal that the teacher is all-important in recognizing and developing giftedness in children. By virtue of her daily association with these children and her role in their guidance, she assumes a responsibility of special significance. Through her personal relationship with the child and the experiences provided in her classroom, the school fulfills its obligation to develop to the maximum the superior abilities of its gifted children. The teacher not only implements the school's program but coordinates in her classroom all the human and material resources of the home, school, and community that are being utilized to meet the special needs and interests of the gifted. The daily experiences afforded there are the focal point, the heart, of the larger program and the total community provision for cultivating giftedness.

THE TEACHER AS A PERSON

The teacher who is to fulfill this role effectively must be first of all qualified by personality.(1) She must be alert, friendly, and understanding—a well-adjusted individual who is genuinely responsive in human relations. She must have the functioning point of view that every individual should be helped to develop his potentialities as a person and as a citizen.(1) She also must have personal qualities that children like and want.

Although it is desirable for a teacher of intellectually gifted children to rank above average in intellectual ability, she need not be gifted in order to guide their learning and development. Her greatest

need is to understand gifted children, appreciate their gifts, and know how to provide for their development. Of course, she is better able to lend guidance and stimulation to the child's intellectual development if she is "more nimble mentally and somewhat more widely read than the teacher of average children." (1:112) Her ability to pose stimulating questions, suggest sources for further exploration, and guide the child to make sound generalizations and do critical thinking are of greater value than supplying answers from her own store of knowledge.

THE TEACHER AS A PSYCHOLOGIST AND COUNSELOR

Knowledge of group techniques appropriate to an informal classroom is an asset, for it helps to foster the intellectual interests of the gifted child without sacrificing necessary social relationships with peers. An understanding of child development enables the teacher to recognize superior ability in special areas. (1) By knowing the characteristics of children's art at each developmental level, for example, she is better able to identify the creative talent evidenced in the paintings of an eight-year-old. Similarly, an awareness of conditions affecting learning increases her understanding of the child's failure to make the progress expected in terms of his known ability. (1)

A thorough acquaintance with the developmental tasks to be met and mastered by children is another requisite of effective teaching of the gifted. The child needs the teacher's support in meeting these tasks which are a part of normal growth. Also, it is necessary for the teacher to be aware of the barriers that prevent the child's satisfaction of his needs and create inner conflicts. It becomes her responsibility to prevent the accumulation of too many stresses in the youngster's environment and to provide outlets for his tensions. Providing an atmosphere that removes barriers and satisfies needs, then, should be among her achievements.

THE TEACHER AS INSTRUCTOR

In addition to these abilities, the teacher should be able to give instruction in a variety of techniques as the need for them becomes apparent. In creative expression, care must be taken that originality and initiative are not suppressed. In intellectual activities, techniques of locating new sources of information, gathering facts, and recording

them in usable form enables the child to derive greater satisfaction from his achievement; but again the technique should serve his purpose, not dominate it.

Another requisite is that of being able to extend or enrich curricular experiences in accordance with the child's interests and ability. A closely related qualification is that of using appropriate community resources.(25) The effectiveness of these achievements is exemplified in the discussion of current practices (Chapter III) and the suggestions for enrichment in the regular classroom (Chapter IV). In providing a variety of opportunities and experiences, in a stimulating environment rich in relationships and activities, the teacher applies her knowledge, understanding, and ability. The program that she maintains is the true measure of her ability to "give the child room to grow, freedom to develop, incentive to make constructive use of his creative power."(19:12)

OTHER QUALIFICATIONS

These are the personal qualifications and teaching skills that define the special role of the "teacher of the gifted." They are the qualities desired in teachers of *every* child in our schools. But because of the gifted child's abilities and his special social and emotional needs, certain additional attitudes, understandings and abilities are desired. Some of these have been identified in the chapter dealing with the special problems of the gifted child. Helping the child to understand his special gifts and value the talents and interests of others is one example. Understanding the unevenness among areas of development and providing experiences that will promote balanced growth is another.

Freedom from jealousy of the child's special ability is a quality particularly needed in teachers of the gifted. Frequently the child's intellectual interests and even his mental ability surpass those of the teacher. Only if she has achieved a sense of security and self-acceptance(25) can she free herself of envy and resentment and be willing to learn *with* him. Since many gifted children's interests lead them to intellectual levels beyond the teacher's comprehension, she must be able to admit that she does not know and demonstrate her willingness to "find out" with him. Such evidence of genuine interest and acceptance is stimulating to the child and strengthens the teacher-

pupil relationship. The attitude of acceptance must prevail among the other children in the classroom as well, and it is the teacher's responsibility to foster and develop it.

Working with Parents

Ability to work with parents is another essential qualification of teachers of gifted children. They should be prepared to help parents who fail to provide the experiences their children need or who exploit their talented boys and girls.(1) Teachers will benefit by gaining an understanding of the attitudes and needs which motivate either neglect or unreasonable ambition on the part of parents.

Working with School and Community Personnel

The teacher's role extends beyond her own school in her work with other school and community personnel for the development of community-wide provision for the gifted.(25) She can help develop lay recognition of the necessity to provide for the gifted and help plan for meeting their needs. Her contribution may take the form of participation in parent study groups or of membership in community councils. She may address groups of parents and meetings of civic organizations and community agencies. Skill in working with individuals and groups, both in the school and in the community, enables her to contribute more effectively to the gifted child's total educational experience.

In summary, the role of the teacher of gifted children is that of being at once the well-adjusted adult, the instructor, the fellow-learner, the psychologist, the mental hygienist, the community worker, the counselor, the specialist in method, and the sympathetic, understanding friend. The effects of her personality and skill extend into all areas of the child's life and touch upon every aspect of his development.

SUGGESTED PROCEDURES

Fulfilling such a role seems at first an overwhelming task. A restatement of the teacher's responsibilities in terms of things she can do in the classroom, day by day, portrays the realistic and attainable aspects of the role. The following suggestions are offered as guideposts to

the teacher. At the same time, they summarize the procedures that have been pointed up in other sections of this book.

1. *"Know thyself."* Be sure of your own mental health. Know your own strengths and needs. Feel happy and secure in your relationship with the children. Keep free from resenting the gifted child's superiority if his mind is keener than yours. Be careful not to minimize his abilities. On the other hand, be careful also not to exploit them.
2. *Know the child.* Know his needs, feelings, and attitudes. While his problems are basically the same as those of other children of his chronological age, they may have special implications and need special attention because of the reaction of others to his giftedness.
3. *Guide the child.* Help him to accept the inequality of his superior abilities, see his relationship to others and his responsibility to society, and appreciate the value of contributions made by others who have abilities different from his own. Respect his opinion, answer his questions intelligently, study *with* him any problem he seeks to solve, encourage him, discuss matters with him at his own mental (not chronological) level, and respect his thinking powers.(19) Likewise, expect from him work of a standard that is commensurate with his known ability.
4. *Provide environment* that presents opportunities for varying interests and abilities to be challenged and developed. Find appropriate materials, resource persons, and experiences that can enrich his day-by-day activities.
5. *Allow him to work independently* in the areas of his special interests. Help him thus to use the initiative and originality with which he has been endowed.
6. *Integrate his individual projects* with group activities (reports, demonstrations, etc.) so that he remains a group member and enjoys desirable status with peers.
7. *Promote his interest and participation in physical activities and play* through experiences with children of his own physical maturity, as well as with those of similar mental level.(12)
8. *Provide for social development* through balanced experiences that promote happy associations with other children—some with children of his chronological age and some with children of his mental age. Remember that his intellectual development may have been more rapid than his physical and emotional growth. Adjust his school activities accordingly.
9. *Avoid demands for identical standards of achievement* in all subject-matter areas, knowing that the gifted child is not always superior or interested in all of them.(18) Of course, development in deficient areas is to be encouraged, but not necessarily beyond the achievement to be expected in terms of his chronological age. Examine work habits

and attitudes as possible causes of deficiency, since some gifted children find intellectual tasks so easy that they tend to become careless in mechanical details.

10. *Adapt drill work* to the child's individual needs (reducing the amount but not eliminating it). Gifted children learn more rapidly than others, and they often acquire some learnings, such as punctuation and spelling, almost unconsciously through extensive reading.
11. *Provide opportunities for development of leadership ability*, but remember that leadership does not always imply a "spotlight" position and that the ability to follow is also important.
12. *Recognize special creative talents*, such as in music or art, and give the child the responsibility of making the most of them. (19) At times the use of such talents may provide the motivation for self-improvement in personality growth and school adjustment. (13)
13. *Use wise methods of discipline*. Remember that because of his intellectual maturity, the gifted child responds more readily than many others to a valid appeal to reason, the presentation of others' points of view, consistent rewarding of merit, and hero worship. On the whole, he is reasonable and cooperative if adults are honest, kind and intelligent in their dealings with him. (15)

SUMMARY

In this book attention has been directed to the nature of giftedness; the gifted child's needs, interests, and abilities; methods of identifying them; and the kinds of experiences that contribute to his optimum development in all areas. The discussion points up a vital need for teachers, school systems, and communities to cooperate in formulating systematic policies and procedure for the education of the gifted, beginning in the preschool years.* Policies so developed should incorporate the principle that special provisions be made for children of exceptional ability *because of their exceptional ability*. This principle is in harmony with the democratic concept that all educational programs should be adapted to meet the unique needs and abilities of individual students, (11) and that educational opportunities should be provided which enable every citizen to contribute to the common welfare to the full extent of his ability. (1)

* Suggested procedures for cooperative planning by home, school, and community for the education of the gifted can be found in three excellent articles, titled "Total Planning for the Gifted Child," appearing in the January, February, and March (1952) issues of *Exceptional Children*, published by the International Council for Exceptional Children, of the National Education Association, Washington, D. C.

Of the various procedures that are particularly adaptable to the education of the gifted, the enrichment program offers the greatest opportunity for the achievement of goals, under the existing circumstances in most communities. It is adaptable to the human and physical resources of the home, school, and community in which the child lives and learns; thus it varies from locality to locality. Enrichment combines experiences that are the same as those of other students and that differ in scope, depth, and level; it utilizes the principles and procedures of both individual and group instruction. Effective implementation of an enrichment policy calls for the same principles of teaching and the same personal qualities in teachers as apply to *good* teaching and *good* teachers in general. The maximum effectiveness is more attainable, however, if such special factors as smaller classes and fewer extra-classroom responsibilities for the teacher are permitted, and if outstanding personal attributes are present. These attributes include emotional stability, maturity, a high degree of creativeness, inventiveness, a broad background of information and varied experience, and superior intelligence.(24)

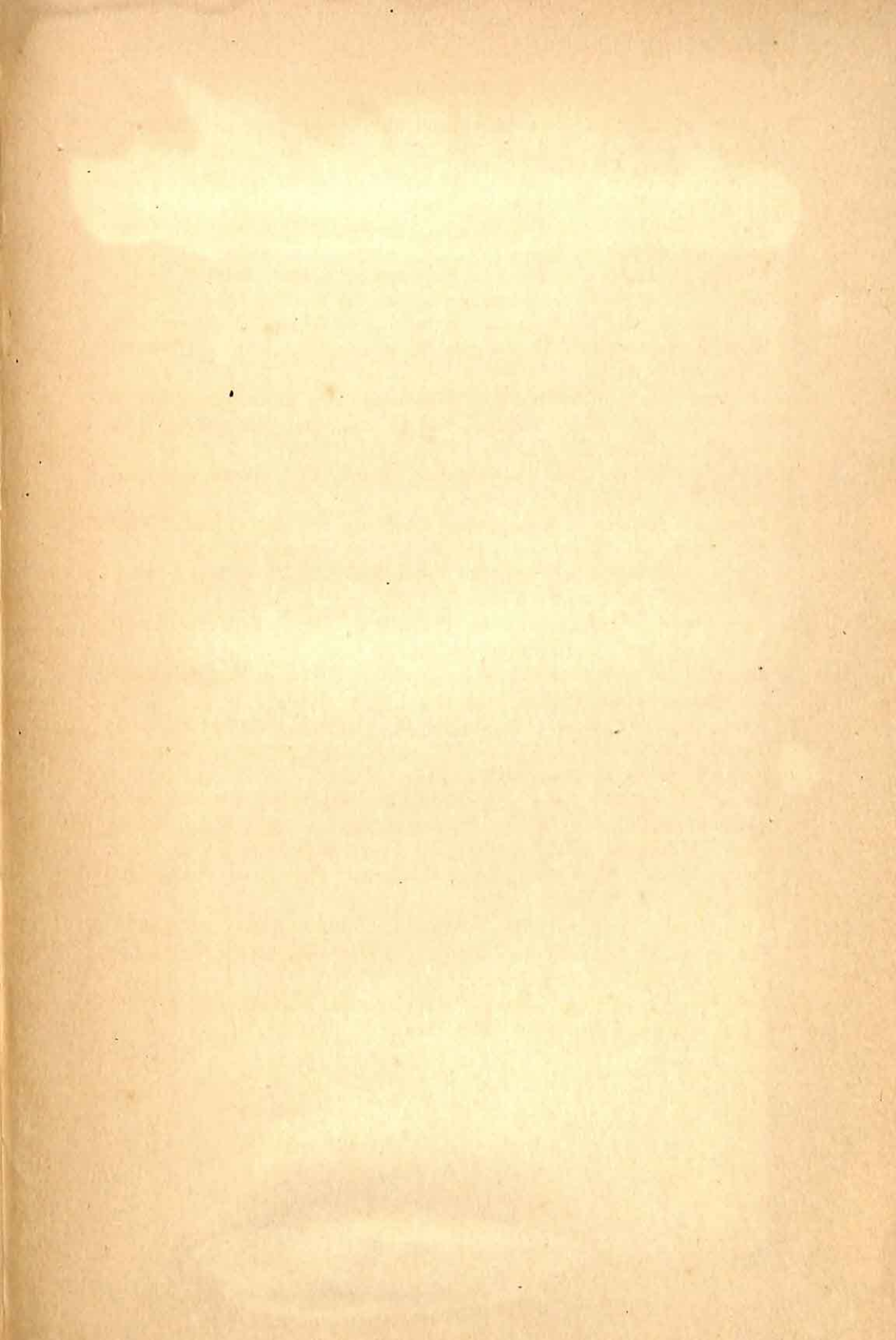
The focal point and the primary objective of *all* policy, program, and teaching procedure is the gifted child's full development. He needs early identification, stimulation, and cultivation of his special ability and creativeness. The home, school, and community must cooperate in providing for his fullest growth from early childhood to maturity. Underlying the total program is the basic precept that the gifted child is first of all a person, possessing all the drives that motivate people in general. He needs affection, acceptance, recognition, and security just as much as he needs the "opportunity" for self-development. He needs guidance in social-personal adjustment difficulties, just as other children do, although he may be able to contribute more to the solution of his problems by virtue of his superior qualities of insight and self-diagnosis.

The teacher holds the fate of the gifted child in her hands. She must utilize *all* of the resources at her command (including her own personality and teaching skill) to enrich his experiences and help him grow toward complete self-realization. Her responsibility is awesome. If she fulfils it, she contributes richly to the progress of man and civilization.

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